Autore L. Aegidio Lacarry

MATHEMATICA

TABVLÆ

Logarithmeticæ ad Triangulorum Rectilineorum & Sphæricorum Analysin.

TABVLÆ

Lunæ Solares ad inuestigãda Eclipsiũ Lunarium & Solarium momenta.

Meridiano Parisino accommodatæ.

Initium sumitur à media nocte ante Cal. Ian.

PARISIIS.

ELENCHVS

Eorum quæ in prima huius operis parte continentur.

Obſeruationes ad vſum proximè ſuperioris Tabulæ.

Expoſitio Tabularum Lunæ Solarium.

Tabulæ Lunæ Solares.

Vſus Superiorum Tabularum ad Eclipſium analyſin.

Tabulæ aliæ Anomaliæ Æquinoctiorum, Proſtaphæreſeon Centri Solis, & Lunæ, &c.

Radices Tychonianæ, cum vſu, & duabus Tabulis motus Solaris & Lunaris.

DEFINITIONES

ANGVLVS *Rectus* fit a duabus lineis quarum vna in alteram ad perpendiculum adit. Vide in Tabula proxima figurarum figuram 1.

ANGVLVS *Acutus* minor est recto.

ANGVLVS *Obtusus* maior est recto.

ANGVLVS *Comprehensus* qui clauditur duobus lateribus datis.

LATVS *Adiacens Angulo* qui angulum cum alio latere claudit.

TRIANGVLVM *Rectilineum* quod ex tribus rectis lineis componitur.

TRIANGVLVM *Sphæricum* quod in superficie sphærica fit a tribus maximorum circulorum arcubus. Vid. fig. 11.

TRIANGVLVM *Rectangulum* quod vnum e suis angulis rectum habet. vid. fig. 111. in qua litera A notat Angulum.

TRIANGVLVM *Obliquangulum* quod nullum angulum rectum habet. vide. fig. 1v.

MENSVRA *Anguli* est arcus a vertice anguli tanquam centro descriptus inter duas rectas lineas angulum constituentes. vid. fig. v. in qua littera O verticem anguli denotat, talis arcus diuiditur in gradus.

MENSVRA *Anguli Sphær.* est arcus oppositus maioris circuli, subtendentis in triangulo sphærico huiusmodi angulum.

CHORDA Linea ſubtendens arcum. vid. fig. VI. in qua AO eſt Chorda.

SINVS *Rectus Arcus*, eſt dimidium chordæ ſubtendentis duplum illius arcus, ita in Fig. VI. OH eſt ſinus rectus arcus OI. at linea HI eſt ſinus verſus ſeu ſagitta.

SINVS *Totus* eſt radius ſiue ſemidiameter circuli, ideſt ſinus rectus Quadrantis Circuli, ſeu media pars rectæ ſemicirculum ſubtendentis, talis in VI. fig. eſt Linea TM. Sinus totus eſt apud nos 1000000 partium.

COMPLEMENTVM *Arcus* eſt numerus graduum quibus arcus differt a 90 gradibus ſiue per exceſſum ſiue per defectum. Ita in numero 111, 21, eſt complementum ad 90 per exceſſum. At in numero 64, 26, eſt per defectum complementum ad 90.

ANGVLI *Complementum* eſt differentia ipſius anguli a recto angulo, ſiue illa differentia ſit per exceſſum ſiue per defectum. Angulus Rectus ex 90 gradibus conſtituitur.

COMPLEMENTVM *Arcus ad ſemicirculum* eſt defectus ſeu differentia ipſius ad ſemicirculum.

TANGENS eſt linea recta quæ tangens circulum concurrit in contactu cum ſemidiametro perpendiculariter. talis eſt in fig. VI IO.

SECANS quæ a Centro Circuli ducta ad Tangentem ſecat quadrantem Circuli, talis in fig. VI. Linea TO.

VSVS CANONIS SINVVM ET TANGENTIVM.

CAP. I.

1. QVÆLIBET huius Canonis pagina ſex habet columnas. Prima columna ad læuam continet minuta graduum in fronte ſecundæ & tertiæ columnæ inſcriptorum deſcendendo. Sexta vero columna continet item minuta graduum in fronte quartæ & quintæ columnæ in eadem pagina inſcriptorum aſcendendo a calce paginæ ad frontem.

2. *Gradus* inſcripti ſecundæ & tertiæ columnæ incipiunt a primo minuto quod eſt in capite primæ columnę, at gradus inſcripti quartæ & quintæ columnæ incipiunt a primo minuto quod eſt in calce ſextæ columnæ.

3. *Gradus* fronti cuiuſlibet paginæ quartæ aut quintæ columnæ inſcripti, ſunt complementum ad gradus 90. ſiue ad Quadrantem circuli, graduum qui ſuperſcripti ſunt ſecundæ & tertiæ columnæ & vice verſa. Ita gradus 88. ſunt complementum gradus 1. & è conuerſo gradus 1. eſt compl. grad. 88.

4. Secunda columna cuiuſlibet paginæ continet *Sinus* reſpõdentes minutis adſcriptis primæ columnæ, quæ minuta pertinent ad gradus ſuperſcriptos; Tertia vero columna continet *Tangentes*. At quarta & quinta columna habẽt *Sinus* & *Tangentes* inſcriptorum graduum, & minutorum ſextę columnæ adſcriptorum.

Cap. 2.

DATO *Logarithmo Sinus aut Tangentis, Grad⁹ & Minuta respondentia, inuenire.*

Quære in columnis Sinuum & Tangentium datum Logarithmum & respondentes proximè è regione gradus & minuta, ex superioribus præceptis collige.

EXEMPLVM.

Logarithmus 981997. inuenitur in secunda columna sinuum, igitur sibi vindicat 41. g. 21. m. respondentia.

Cautio Continget aliquando dari vel ex operationibus confici Logarithmos qui in canone quæsiti non occurrent, sed erunt maiores aut minores & medij inter proximè maiorem & proximè minorem, tum certè minuta media paria, non annotata pertinebunt ad Logarithmum datum.

EXEMPLVM.

Logarithmus sinuum 837745. non inuenitur in canone & columnis sinuũ & habet proximè maiorem 838276. cui respondent 1. g. 23. m. & proximè minorem 837217. cui respondet 1. g. 21. m. igitur Logarith. datus 837745. intermedius vindicabit sibi 1. g. 22. m.

Cap. 3.

DATO *Arcu vel Angulo inuenire Logar. Sinus eius, vel Tangentis.*

Quære arcus vel anguli dati gradus in fronte paginæ, & minuta in prima columna ad læuam: si gradus inscripti sunt secundæ & tertiæ columnæ. si verò inscripti sunt quartæ & quintæ columnæ, minuta in columna sexta quære, tum

ogarithmos ſinuum aut Tangentium proxi-
ie è regione minutorum reſpondentes ex-
erpe.

EXEMPLVM.

ngulus 21. g. 11. m. Logarithm. ſin. 955793.

Minuta breuitatis cauſa annotauimus alterna,
t imparia quia ſine erroris periculo poſſunt
ſorum Logarithmi proximi poni pro inter-
ediis & paribus non annotatis. Ita Logarith.
rium graduum, minutorum 7. vel 9. poſ-
nt ſumi pro Logarith. minutorum 8. non ad-
criptis.

CAP. 4.

DATO *angulo vel arcu inuenire Sinum aut Tangentem complementi eius ad 90.*

Quære gradus & minuta arcus vel anguli cu-
us quæris complementum, qui ex aduerſo in
adem pagina reſpondent gradus & minuta,
unt gradus & minuta complementi & Lo-
arithmi illis gradibus & minutis complemen-
i affixi, ſunt Logarithmi complementi.

EXEMPLVM.

Complem. Arcus 22. g. 13. m. ſunt qui ex ad-
erſo in eadem pagina reſpondent grad. 67. 47.
n. Logar. vero Sin. affixus huic complemento
ſt 996649. E conuerſo complementum arcus
7. 47. eſt 22. 13. quibus reſpõdet Logar. 957761.

CAP. 5.

DATO *Angulo obtuſo ſiue excedente 90. gradus, & arcu ſimiliter, Sinus eius aut Tangentis Logar. inuenire.*

Deme gradus anguli obtusi ex 180.& residuum quære in canon. Logar. qui competet Logarithmus pertinebit ad angulum obtusum vel arcum datum.

EXEMPLVM.

Angulus 121. g.31.m. Residuum ex subtractione 180. grad. sunt 58. g. 29. m. Logarith. Sin. respondens 993068.

CAP. 6.

DATO Angulo obtuso siue excedente 90. gradus, & arcu similiter, inuenire Logar. complemento respondentem.

Tolle 90 ex summa graduum anguli, vel arcus dati, residuum in Tabulam Logarith. translatum dabit Logar. complementi.

EXEMPLVM.

Angul. 131. g. 31. m. residuum subtractis 90. g. est 41.g.31. m. Logar. Sin. 982140.

VSVS TABVLARVM LOGARITHMETICARVM in Triangulis Rectilineis.

OBSERVATIONES.

1. TOTA triangulorum Analysis fit per regulam auream seu per additionē Logar. secundi & tertij numeri & subtractionem Logar. primi numeri à summa aliorum duorum.

2. In quolibet Triangulo rectilineo tres simul anguli æquales sunt duobus rectis, seu grad. 180. quare cognitis duobus angulis tertius

noſcitur, qui eſt complementum ad 180. tem vno angulo cognito ſumma aliorum duorum cognoſcitur eodem modo.

3. Angulos Triang. rectil. quære in Sinibus & Tangentibus. At latera in altero ſequenti Canone Logar. abſolutorum numerorum: ſed ſi quis angulus maior fuerit 90. quærendus eſt vt præſcribitur cap. 5. ſupra.

PROBLEMA. I.

DATIS tribus angulis & vno latere inuenire alterum ex lateribus.

Vt ſe habet ſinus anguli oppoſiti lateri dato ad idem latus, ſic & ſinus anguli oppoſiti lateri quæſito ad idem latus.

PRAXIS.

Vt ſe habet ſinus anguli	14, 41.	940393.
Ad latus datum & oppoſitum	100.	200000
Ita ſinus anguli.	43, 21.	983661
Summa ex additione Logar.		1183661
Ad latus quæſitum.	270.	243268

Aliud vero latus inuenies eodem modo ſi tertij anguli obtuſi 121. g. 58. m. ſumas per cap. 5. differentiam ad 180. quæ eſt 58. g. 2. m.

Vt ſe habet ſinus anguli	14, 41.	940393
Ad latus datum & oppoſitum	100.	200000
Ita ſinus anguli.	58. 2.	992849
		1192849
Ad latus quæſitum.	334.	252456

PROBLEMA. II.

DATO vno latere & duobus angulis inuenire alium angulum & alia duo latera.

Angulum inuenies per ſecundam obſeruatio-

nem superius positam, est enim complemen
tum ad 180. v. g. summa angulorum 14, g. 41
m. & 43, g. & 21. m. completur per numerum
tertij anguli 121, 58. hoc verò Angulo inuen-
to duo quæsita habebis latera ex *primo probl.*

PROBLEMA III.

DATIS duobus lateribus vnoque ex oppositis angulis inuenire angulum oppositum.

Vt se habet oppositum dato		*Angulo*
latus	100.	200000
Ad sinum anguli oppositi	14, 41.	940393
Ita oppositum angulo quæsito latus	270.	243268
		1183661
Ad sinum angul. oppositi	43, 21.	983661.

PROBLEMA. IV.

DATIS duobus lateribus & angulo quem continent duos alios angulos & incognitum latus inuenire.

Si angulus comprehensus rectus est, & latera inter sese æqualia, quæsiti anguli æquales erunt, & quilibet grad. 45.

Si rectus est angulus & latera inæqualia, sic operare.

Vt se habet maius latus	230.	236172
Ad minus latus	143.	215533
Ita sinus totus		1000000
	minoris	1215533
Ad tangentem quæsiti anguli	31, 52.	979361

Si comprehensus inter latera angulus obliquus est, nota differentiam vtriusque lateris, & partire summam duorũ angulorũ incognitorũ. tum addito vtroque hoc latere sic operare (si, v.

. latus alterum est 271, alterum 100.)
t se habet summa amborum later. 371. 256937
d differentiam eorundem laterũ 171. 223299
ta tangens dimidiæ summæ duorum angulorum
cognitorum. 29. 974375
1197674
d Tangentem ang. quæsiti 14, 20. 940737
lumerus ille 14,20; additus gradibus 29,
ui mediam conflant summam Ignotorum
ngulorum, dabit gradus 43, 20, numerum
ilicet alterius ex quæsitis angulis; Idem
umerus 14, 20, si subtrahatur e gradibus
9, residuum est 14, 40, numerus tertii an-
uli. Cognitis tribus angulis& duobus latera-
us, tertium latus ex *primo Probl.* inuenitur.

PROBLEMA. V.

DATIS tribus lateribus inuenire segmenta quæ fiunt à perpendiculari linea ducta ab angulo opposito lateri maiori, & cadente in idem latus, posteaque tres angulos inuenire.

Hæc perpendicularis linea *Primò* dat duos an-
ulos rectos in duobus triangulis factis ex
riangulo dato.

Secundò quodlibet segmentum huius lineæ ex
equentibus præceptis cognoscendum, latus
num vtriusque trianguli constituit, quod latus
um alio iam dato, & angulo recto dabit ex
ertio Problemate duos alios angulos vtriusque trianguli, atque adeo omnes angulos maioris trianguli, cuius hæc duo triangula rectangula sunt tantum partes.

Sit itaque maius trianguli latus 21, alia vero
uo 13. & 20, differentia autem inter hæc

duo latera 7.

Vt se habet maius latus	21.	13221
Ad summam duorum laterum	33.	15185
Ita differentia laterum	7.	08450
		25636
Ad quartum numerum	11.	10413

Quem numerum 11. si demas ex maiori latere 21. in Fig. VII. supereſt 10. cuius dimidia pars est 5. nempe segmentū minus O H. quod segmentum si demas ex maiore latere 21. supereſt 16. seu maius Segmentum O M. Hæc vero duo segmenta constituunt duo latera & quidem O M Segmentum maius, latus trianguli A O M. & O H. Segmentum minus, latus trianguli A O H. Vides itaque ex vno, duo constitui triangula rectangula M A O. & A H O. & horum triangulorum duo latera cognita esse cum angulis rectis, quare ex *Prob.* 3. anguli vtriusque trianguli noti sunt, vnde facile totalis trianguli angulos habebis, quorum duo iidem sunt qui triangulorum rectangulorum.

PROBLEMA. VI.

DATIS tribus lateribus aream trianguli inuenire.

1. Adde tria latera. 2. summam bipartire, ex dimidia summas subtrahe singula latera, & singulas differentia nota. 4. adde logarithmos dimidiæ summæ, trium differentiarum logarithmos. 5. summam logar. bipartire, Residuum est logar. quæsitæ areæ. v. g. sint latera 20. 13. 11. Summa laterum est 44. dimidia summa 22. differentiæ vero laterum a dimidia summa sunt 2. 9. 11.

Dimidium ſummæ laterum	22.	134242
	2.	030102
Differentiæ laterũ a dimidia ſũma	9.	095424
	11,	104139
Summa Logarithmorum.		363907
Logar. numeri abſoluti	06.	181954
et area quæſita.		

TABVLA LOGARITHMETICA

Sinuum & Tangentium

Graduum & Minutorum

Quadrantis circuli.

Sinus Totus 1000000

Operationes fiunt omnes per Regulam
auream quæ conficitur
Additione secundi & tertij numeri &
subtractione primi.

Minuta in sequenti canone breuitatis causa
alterna & imparia ponuntur
Quæ pro intermediis non annotatis tutó
sumi possunt.

Sin. o	Tang. o	
1	646372	646372
3	694084	694084
5	716269	716269
7	730882	730882
9	741796	741796
11	750511	750512
13	757766	757767
15	763981	763982
17	769417	769417
19	774247	774248
21	778594	778595
23	782545	782546
25	786166	786167
27	789508	789509
29	792611	792613
31	795508	795509
33	798223	798225
35	800778	800780
37	803191	803194
39	805478	805481
41	807649	807653
43	809728	809721
45	811692	811696
47	813581	813585
49	815390	815395
51	817128	817132
53	818798	818803
55	820407	820412
57	821958	821964
59	823455	823462

Sin. 89	Tang. 89	
999999	1353627	59
999999	1305915	57
999999	1283730	55
999999	1269117	53
999999	1258203	51
999999	1249487	49
999999	1242232	47
999999	1236017	45
999999	1230582	43
999999	1225751	41
999999	1221404	39
999999	1217453	37
999998	1213832	35
999998	1210490	33
999998	1207386	31
999998	1204490	29
999998	1201774	27
999997	1199219	25
999997	1196805	23
999997	1194518	21
999996	1192346	19
999996	1190278	17
999996	1188303	15
999995	1186414	13
999995	1184604	11
999995	1182867	9
999994	1181196	7
999994	1179587	5
999994	1178035	3
999993	1176537	1

Sin. 1	Tang. 1
824903	824910
826304	826311
827661	827669
828977	828985
830254	830263
831495	831504
832701	832711
833875	833885
835018	835028
836131	836142
837217	837229
838276	838283
839310	839323
840319	840333
841306	841321
842271	842286
843215	843231
844139	844156
845044	845061
845930	845948
846798	846817
847649	847669
848484	848505
849303	849325
850107	850129
850897	850920
851672	851696
852434	852458
853182	853207
853918	853944

Sin. 88	Tang. 88	
999993	1175089	59
999992	1173688	57
999992	1172330	55
999991	1171014	53
999991	1169736	51
999990	1168495	49
999990	1167288	47
999989	1166114	45
999989	1164971	43
999988	1163857	41
999987	1162770	39
999987	1161711	37
999986	1160679	35
999986	1159666	33
999985	1158678	31
999984	1157713	29
999984	1156768	27
999983	1155843	25
999982	1154938	23
999981	1154051	21
999981	1153182	19
999980	1152330	17
999979	1151494	15
999978	1150674	13
999978	1149870	11
999977	1149079	9
999976	1148303	7
999975	1147541	5
999974	1146792	3
999973	1146055	1

Sin. 2	Tang. 2		Sin. 87	Tang. 87	
1	854642	854669	999973	1145330	59
3	855353	855381	999972	1144618	57
5	856054	856082	999971	1143917	55
7	856743	856772	999970	1143227	53
9	857421	857451	999969	1142548	51
11	858089	858120	999968	1141879	49
13	858746	858779	999967	1141220	47
15	859394	859428	999966	1140571	45
17	860033	860067	999965	1139932	43
19	860662	860697	999964	1139302	41
21	861282	861318	999963	1138681	39
23	861893	861931	999962	1138068	37
25	862496	862535	999961	1137464	35
27	863091	863130	999960	1136869	33
29	863677	863718	999959	1136281	31
31	864256	864298	999958	1135701	29
33	864827	864870	999956	1135129	27
35	865391	865435	999955	1134564	25
37	865947	865992	999954	1134007	23
39	866496	866543	999953	1133456	21
41	867039	867086	999952	1132913	19
43	867575	867623	999951	1132376	17
45	868104	868154	999949	1131845	15
47	868627	868678	999948	1131321	13
49	869143	869196	999947	1130803	11
51	869654	869708	999946	1130291	9
53	870158	870213	999944	1129786	7
55	870657	870713	999943	1129286	5
57	871150	871208	999942	1128791	3
59	871638	871697	999941	1128302	1

Deme gradus anguli obtusi ex 180. & residuum quære in canon. Logar. qui competet Logarithmus pertinebit ad angulum obtusum vel arcum datum.

EXEMPLVM.

Angulus 121. g. 31. m. Residuum ex subtractione 180. grad. sunt 58. g. 29. m. Logarith. Sin. respondens 993068.

CAP. 6.

DATO Angulo obtuso siue excedente 90. gradus, & arcu similiter, inuenire Logar. complemento respondentem.

Tolle 90 ex summa graduum anguli, vel arcus dati, residuum in Tabulam Logarith. translatum dabit Logar. complementi.

EXEMPLVM.

Angul. 131. g. 31. m. residuum subtractis 90. g. est 41. g. 31. m. Logar. Sin. 982140.

VSVS TABVLARVM LOGARITHMETICARVM in Triangulis Rectilineis.

OBSERVATIONES.

1. TOTA triangulorum Analysis fit per regulam auream seu per additionē Logar. secundi & tertij numeri & subtractionem Logar. primi numeri à summa aliorum duorum.

2. In quolibet Triangulo rectilineo tres simul anguli æquales sunt duobus rectis, seu grad. 180. quare cognitis duobus angulis tertius

noſcitur ; qui eſt complementum ad 180. tem vno angulo cognito ſumma aliorum duo- rum cognoſcitur eodem modo.

3. Angulos Triang. rectil. quære in Sinibus & Tangentibus. At latera in altero ſequenti Canone Logar. abſolutorum numerorum : ſed ſi quis angulus maior fuerit 90. quærendus eſt vt præſcribitur cap. 5. ſupra.

PROBLEMA. I.

DATIS tribus angulis & vno latere inuenire alterum ex lateribus.

Vt ſe habet ſinus anguli oppoſiti lateri dato ad idem latus, ſic & ſinus anguli oppoſiti lateri quæſito ad idem latus.

PRAXIS.

Vt ſe habet ſinus anguli	14, 41.	940393
Ad latus datum & oppoſitum	100.	200000
Ita ſinus anguli.	43, 21.	983661
Summa ex additione Logar.		1183661
Ad latus quæſitum.	270.	243268

Aliud vero latus inuenies eodem modo ſi tertij anguli obtuſi 121. g. 58. m. ſumas per cap. 5. differentiam ad 180. quæ eſt 58. g. 2. m.

Vt ſe habet ſinus anguli	14, 41.	940393
Ad latus datum & oppoſitum	100.	200000
Ita ſinus anguli.	58. 2.	992849
		1192849
Ad latus quæſitum.	334.	252456

PROBLEMA. II.

DATO vno latere & duobus angulis inuenire alium angulum & alia duo latera.

Angulum inuenies per ſecundam obſeruatio-

nem ſuperius poſitam, eſt enim complementum ad 180. v. g. ſumma angulorum 14, g. 41. m. & 43, g. & 21. m. completur per numerum tertij anguli 121, 58. hoc verò Angulo inuento duo quæſita habebis latera ex *primo probl.*

PROBLEMA III.

DATIS *duobus lateribus vnoque ex oppoſitis angulis inuenire angulum oppoſitum.*

Vt ſe habet oppoſitum dato		*Angulo*
latus	100.	200000
Ad ſinum anguli oppoſiti	14, 41.	940393
Ita oppoſitum angulo quæſito latus	270.	243268
		1183661
Ad ſinum angul. oppoſiti	43, 21.	983661.

PROBLEMA. IV.

DATIS *duobus lateribus & angulo quem continent duos alios angulos & incognitum latus inuenire.*

Si angulus comprehenſus rectus eſt, & latera inter ſeſe æqualia, quæſiti anguli æquales erunt, & quilibet grad. 45.

Si rectus eſt angulus & latera inæqualia, ſic operare.

Vt ſe habet maius latus	230.	236172
Ad minus latus	143.	215533
Ita ſinus totus		1000000
	minoris	1215533
Ad tangentem quæſiti anguli	31, 52.	979361

Si comprehenſus inter latera angulus obliquus eſt, nota differentiam vtriuſque lateris, & partire ſummam duorũ angulorũ incognitorũ. tum addito vtroque hoc latere ſic operare (ſi, v.

g. latus alterum est 271, alterum 100.)
Vt se habet summa amborum later. 371. 256937
Ad differentiam eorundem laterũ 171. 223299
Ita tangens dimidiæ summæ duorum angulorum incognitorum. 29. 974375
1197674
Ad Tangentem ang. quæsiti 14, 20. 940737
Numerus ille 14,20, additus gradibus 29, qui mediam conflant summam Ignotorum angulorum, dabit gradus 43, 20, numerum scilicet alterius ex quæsitis angulis; Idem numerus 14, 20, si subtrahatur e gradibus 29, residuum est 14, 40, numerus tertii anguli. Cognitis tribus angulis& ductus lateribus, tertium latus ex *primo Probl.* inuenitur.

PROBLEMA. V.

DATIS tribus lateribus inuenire segmenta quæ fiunt à perpendiculari linea ducta ab angulo opposito lateri maiori, & cadente in idem latus, posteaque tres angulos inuenire.

Hæc perpendicularis linea *Primò* dat duos angulos rectos in duobus triangulis factis ex triangulo dato.

Secundò quodlibet segmentum huius lineæ ex sequentibus præceptis cognoscendum, latus enim vtriusque trianguli constituit, quod latus cum alio iam dato, & angulo recto dabit ex *tertio Problemate* duos alios angulos vtriusque trianguli, atque adeo omnes angulos maioris trianguli, cuius hæc duo triangula rectangula sunt tantum partes.

Sit itaque maius trianguli latus 21, alia vero duo 13. & 20, differentia autem inter hæc

duo latera 7.

Vt se habet maius latus	21.	13222
Ad summam duorum laterum	33.	15185
Ita differentia laterum	7.	08450
		23636
Ad quartum numerum	11.	10413

Quem numerum 11. si demas ex maiori latere 21. in Fig. VII. supereſt 10. cuius dimidia pars est 5. nempe segmentū minus O H. quod segmentum si demas ex maiore latere 21. supereſt 16. seu maius Segmentum O M. Hæc vero duo segmenta constituunt duo latera & quidem O M Segmentum maius, latus trianguli A O M. & O H. Segmentum minus, latus trianguli A O H. Vides itaque ex vno, duo constitui triangula rectangula M A O. & A H O. & horum triangulorum duo latera cognita esse cum angulis rectis, quare ex *Probl.* 3. anguli vtriusque trianguli noti sunt, vnde facile totalis trianguli angulos habebis, quorum duo iidem sunt qui triangulorum rectangulorum.

PROBLEMA. VI.

DATIS tribus lateribus aream trianguli inuenire.

1. Adde tria latera. 2. summam bipartire, 3. ex dimidia summas subtrahe singula latera, & singulas differentia nota. 4. adde Logarithmo dimidiæ summæ, trium differentiarum Logarithmos. 5. summam Logar. bipartire, Residuum est Logar. quæsitæ areæ. v. g. sint latera 20. 13. 11. Summa laterum est 44. dimidia summa 22. differentiæ vero laterum a dimidia summa sunt 2. 9. 11.

Dimidium summæ laterum	22.	134242
	2.	030102
Differentiæ laterũ a dimidia sũma	9.	095424
	11.	104139
Summa Logarithmorum.		363907
Logar. numeri absoluti & areæ quæsita.	06.	181954

TABVLA LOGARITHMETICA

Sinuum & Tangentium

Graduum & Minutorum

Quadrantis circuli.

Sinus Totus 1000000

Operationes fiunt omnes per Regulam
auream quæ conficitur
Additione secundi & tertij numeri &
subtractione primi.

Minuta in sequenti canone breuitatis causa
alterna & imparia ponuntur
Quæ pro intermediis non annotatis tutò
sumi possunt.

Sin. o Tang. o			Sin. 89 Tang. 89		
1	646372	646372	999999	1353627	59
3	694084	694084	999999	1305915	57
5	716269	716269	999999	1283730	55
7	730882	730882	999999	1269117	53
9	741796	741796	999999	1258203	51
11	750511	750512	999999	1249487	49
13	757766	757767	999999	1242232	47
15	763981	763982	999999	1236017	45
17	769417	769417	999999	1230582	43
19	774247	774248	999999	1225751	41
21	778594	778595	999999	1221404	39
23	782545	782546	999999	1217453	37
25	786166	786167	999998	1213832	35
27	789508	789509	999998	1210490	33
29	792611	792613	999998	1207386	31
31	795508	795509	999998	1204490	29
33	798223	798225	999998	1201774	27
35	800778	800780	999997	1199219	25
37	803191	803194	999997	1196805	23
39	805478	805481	999997	1194518	21
41	807649	807653	999996	1192346	19
43	809728	809721	999996	1190278	17
45	811692	811696	999996	1188303	15
47	813581	813585	999995	1186414	13
49	815390	815395	999995	1184604	11
51	817128	817132	999995	1182867	9
53	818793	818803	999994	1181196	7
55	820407	820412	999994	1179587	5
57	821958	821964	999994	1178035	3
59	823455	823462	999993	1176537	1

Sin. 1	Tang. 1	
1	824903	824910
3	826304	826311
5	827661	827669
7	828977	828985
9	830254	830263
11	831495	831504
13	832701	832711
15	833875	833885
17	835018	835028
19	836131	836142
21	837217	837229
23	838276	838283
25	839310	839323
27	840319	840333
29	841306	841321
31	842271	842286
33	843215	843231
35	844139	844156
37	845044	845061
39	845930	845948
41	846798	846817
43	847649	847669
45	848484	848505
47	849303	849325
49	850107	850129
51	850897	850920
53	851672	851696
55	852434	852458
57	853182	853207
59	853918	853944

Sin. 88	Tang. 88	
999993	1175089	59
999992	1173688	57
999992	1172330	55
999991	1171014	53
999991	1169736	51
999990	1168495	49
999990	1167288	47
999989	1166114	45
999989	1164971	43
999988	1163857	41
999987	1162770	39
999987	1161711	37
999986	1160679	35
999986	1159666	33
999985	1158678	31
999984	1157713	29
999984	1156768	27
999983	1155843	25
999982	1154938	23
999981	1154051	21
999981	1153182	19
999980	1152330	17
999979	1151494	15
999978	1150674	13
999978	1149870	11
999977	1149079	9
999976	1148303	7
999975	1147541	5
999974	1146792	3
999973	1146055	1

Sin. 2	Tang. 2		Sin. 87	Tang. 87	
1	854642	854669	999973	1145330	59
3	855353	855381	999972	1144618	57
5	856054	856082	999971	1143917	55
7	856743	856772	999970	1143227	53
9	857421	857451	999969	1142548	51
11	858089	858120	999968	1141879	49
13	858746	858779	999967	1141220	47
15	859394	859428	999966	1140571	45
17	860033	860067	999965	1139932	43
19	860662	860697	999964	1139302	41
21	861282	861318	999963	1138681	39
23	861893	861931	999962	1138068	37
25	862496	862535	999961	1137464	35
27	863091	863130	999960	1136869	33
29	863677	863718	999959	1136281	31
31	864256	864298	999958	1135701	29
33	864827	864870	999956	1135129	27
35	865391	865435	999955	1134564	25
37	865947	865992	999954	1134007	23
39	866496	866543	999953	1133456	21
41	867039	867086	999952	1132913	19
43	867575	867623	999951	1132376	17
45	868104	868154	999949	1131845	15
47	868627	868678	999948	1131321	13
49	869143	869196	999947	1130803	11
51	869654	869708	999946	1130291	9
53	870158	870213	999944	1129786	7
55	870657	870713	999943	1129286	5
57	871150	871208	999942	1128791	3
59	871638	871697	999941	1128302	1

Sin. 3	Tang. 3	
1	872120	872180
3	872597	872658
5	873068	873131
7	873535	873599
9	873996	874062
11	874453	874520
13	874905	874974
15	875352	875422
17	875795	875866
19	876233	876306
21	876667	876741
23	877096	877172
25	877522	877599
27	877943	878022
29	878360	878440
31	878773	878855
33	879182	879266
35	879588	879673
37	879989	880076
39	880387	880475
41	880781	880871
43	881172	881264
45	881559	881652
47	881943	882038
49	882324	882420
51	882701	882799
53	883074	883174
55	883445	883547
57	883813	883916
59	884177	884282

Sin. 86	Tan. 86	
999939	1127819	59
999938	1127341	57
999937	1126868	55
999935	1126400	53
999934	1125937	51
999932	1125479	49
999931	1125025	47
999930	1124577	45
999928	1124133	43
999927	1123693	41
999925	1123258	39
999924	1122827	37
999922	1122400	35
999921	1121977	33
999919	1121559	31
999918	1121144	29
999916	1120733	27
999915	1120326	25
999913	1119923	23
999911	1119524	21
999910	1119128	19
999908	1118735	17
999906	1118347	15
999905	1117961	13
999903	1117579	11
999901	1117200	9
999900	1116825	7
999898	1116452	5
999896	1116083	3
999894	1115717	1

Sin. 4 Tang. 4			Sin. 85 Tang. 85		
1	884538	884645	999893	1115354	59
3	884897	885005	999891	1114994	57
5	885252	885362	999889	1114637	55
7	885604	885717	999887	1114282	53
9	885954	886068	999885	1113931	51
11	886301	886417	999884	1113582	49
13	886645	886763	999882	1113236	47
15	886986	887106	999880	1112893	45
17	887325	887446	999878	1112553	43
19	887661	887784	999876	1112215	41
21	887994	888120	999874	1111879	39
23	888325	888453	999872	1111546	37
25	888654	888783	999870	1111216	35
27	888980	889111	999868	1110888	33
29	889303	889436	999866	1110563	31
31	889624	889759	999864	1110240	29
33	889943	890080	999862	1109919	27
35	890259	890398	999860	1109601	25
37	890573	890714	999858	1109285	23
39	890885	891028	999856	1108971	21
41	891194	891340	999854	1108659	19
43	891502	891649	999852	1108350	17
45	891807	891956	999850	1108043	15
47	892110	892261	999848	1107738	13
49	892411	892564	999846	1107435	11
51	892710	892865	999844	1107134	9
53	893006	893164	999842	1106835	7
55	893301	893461	999839	1106538	5
57	893594	893756	999837	1106243	3
59	893884	894049	999835	1105950	1

Sin. 5	Tang. 5		Sin. 84	Tang. 84	
1	894173	894540	999833	1105659	59
3	894480	894629	999831	1105370	57
5	894745	894916	999828	1105083	55
7	895028	895202	999826	1104797	53
9	895309	895485	999824	1104514	51
11	895589	895767	999822	1104232	49
13	895867	896047	999819	1103952	47
15	896142	896325	999817	1103674	45
17	896416	896601	999815	1103398	43
19	896689	896876	999812	1103123	41
21	896959	897149	999810	1102850	39
23	897228	897420	999808	1102579	37
25	897496	897690	999805	1102309	35
27	897761	897958	999803	1102041	33
29	898025	898225	999800	1101774	31
31	898288	898489	999798	1101510	29
33	898549	898753	999795	1101246	27
35	898808	899014	999793	1100985	25
37	899066	899275	999790	1100724	23
39	899322	899533	999788	1100466	21
41	899576	899790	999785	1100209	19
43	899829	900046	999783	1099953	17
45	900081	900300	999780	1099699	15
47	900331	900553	999778	1099446	13
49	900580	900804	999775	1099195	11
51	900827	901054	999773	1098945	9
53	901073	901303	999770	1098696	7
55	901318	901550	999768	1098449	5
57	901561	901795	999765	1098204	3
59	901803	902040	999762	1097959	1

Sin. 6	Tang. 6		Sin. 83	Tang. 83	
902043	902283		999760	1097716	59
902282	902525		999757	1097474	57
902520	902765		999754	1097234	55
902756	903004		999752	1096995	53
902991	903242		999749	1096757	51
903225	903479		999746	1096520	49
903458	903714		999743	1096285	47
903689	903948		999741	1096051	45
903919	904181		999738	1095818	43
904148	904412		999735	1095587	41
904376	904643		999732	1095355	39
904602	904872		999729	1095127	37
904827	905100		999727	1094899	35
905051	905327		999724	1094672	33
905274	905553		999721	1094446	31
905496	905778		999718	1094221	29
905717	906001		999715	1093898	27
905936	906224		999712	1093775	25
906155	906445		999709	1093554	23
906372	906665		999706	1093334	21
906588	906884		999703	1093115	19
906803	907102		999700	1092897	17
907017	907319		999697	1092680	15
907230	907535		999694	1092464	13
907442	947750		999691	1092249	11
907653	907964		999688	1092035	9
907863	908177		999685	1091822	7
908071	908389		999682	1091610	5
908279	908599		999679	1091400	3
908486	908809		999676	1091190	1

Sin. 7	Tang. 7	
1	908692	909018
3	908897	909226
5	909100	909433
7	909303	909639
9	909505	909844
11	909706	910048
13	909906	910251
15	910105	910454
17	910303	910655
19	910500	910856
21	910697	911055
23	910892	911254
25	911087	911452
27	911280	911649
29	911473	911845
31	911665	912040
33	911856	912234
35	912046	912428
37	912236	912621
39	912424	912813
41	912612	913004
43	912799	913194
45	912985	913383
47	913170	913572
49	913355	913760
51	913538	913947
53	913721	914133
55	913903	914319
57	914085	914504
59	914265	914688

Sin. 82	Tang. 82	
999673	1090981	59
999670	1090773	57
999667	1090566	55
999664	1090360	53
999660	1090155	51
999657	1089951	49
999654	1089748	47
999651	1089545	45
999648	1089344	43
999644	1089143	41
999641	1088944	39
999638	1088745	37
999635	1088547	35
999631	1088350	33
999628	1088154	31
999625	1087959	29
999621	1087765	27
999618	1087571	25
999615	1087378	23
999611	1087186	21
999608	1086995	19
999604	1086805	17
999601	1086616	15
999598	1086427	13
999594	1086239	11
999591	1086052	9
999587	1085866	7
999584	1085680	5
999580	1085495	3
999579	1085311	1

Sin. 8	Tang. 8	
1	914445	914871
3	914624	915054
5	9 4802	915236
7	914980	915417
9	915156	915597
11	915333	915777
13	915508	915956
15	915682	916134
17	915856	916312
19	916030	916489
21	916202	916665
23	916374	916840
25	916545	917015
27	916715	917189
29	916885	917366
31	917054	917536
33	917223	917708
35	917390	917879
37	917557	918050
39	917724	918221
41	917890	918390
43	918055	918559
45	918219	918728
47	918383	918895
49	918546	919062
51	918709	919229
53	918871	919395
55	919032	919560
57	919193	919725
59	919353	919889

Sin. 81	Tang. 81	
999573	1085128	59
999569	1084945	57
999566	1084763	55
999562	1084582	53
999559	1084402	51
999555	1084222	49
999551	1084043	47
999548	1083865	45
999544	1083687	43
999540	1083510	41
999537	1083334	39
999533	1083159	37
999529	1082984	35
999525	1082810	33
999522	1082636	31
999518	1082463	29
999514	1082291	27
999510	1082120	25
999507	1081949	23
999503	1081778	21
999499	1081609	19
999495	1081440	17
999491	1081271	15
999487	1081104	13
999483	1080937	11
999479	1080770	9
999475	1080604	7
999471	1080439	5
999467	1080274	3
999463	1080110	1

Sin. 7	Tang. 7	
1	908692	909018
3	908897	909226
5	909100	909433
7	909303	909639
9	909505	909844
11	909706	910048
13	909906	910251
15	910105	910454
17	910303	910655
19	910500	910856
21	910697	911055
23	910892	911254
25	911087	911452
27	911280	911649
29	911473	911845
31	911665	912040
33	911856	912234
35	912046	912428
37	912236	912621
39	912424	912813
41	912612	913004
43	912799	913194
45	912985	913383
47	913170	913572
49	913355	913760
51	913538	913947
53	913721	914133
55	913903	914319
57	914085	914504
59	914265	914688

Sin. 82	Tang. 82	
999673	1090981	59
999670	1090773	57
999667	1090566	55
999664	1090360	53
999660	1090155	51
999657	1089951	49
999654	1089748	47
999651	1089545	45
999648	1089344	43
999644	1089143	41
999641	1088944	39
999638	1088745	37
999635	1088547	35
999631	1088350	33
999628	1088154	31
999625	1087959	29
999621	1087765	27
999618	1087571	25
999615	1087378	23
999611	1087186	21
999608	1086995	19
999604	1086805	17
999601	1086616	15
999598	1086427	13
999594	1086239	11
999591	1086052	9
999587	1085866	7
999584	1085680	5
999580	1085495	3
999579	1085311	1

Sin. 8	Tang. 8	
1	914445	914871
3	914624	915054
5	914802	915236
7	914980	915417
9	915156	915597
11	915333	915777
13	915508	915956
15	915682	916134
17	915856	916312
19	916030	916489
21	916202	916665
23	916374	916840
25	916545	917015
27	916715	917189
29	916885	917366
31	917054	917536
33	917223	917708
35	917390	917879
37	917557	918050
39	917724	918221
41	917890	918390
43	918055	918559
45	918219	918728
47	918383	918895
49	918546	919062
51	918709	919229
53	918871	919395
55	919032	919560
57	919193	919725
59	919353	919889

Sin. 81	Tang. 81
999573	1085128
999569	1084945
999566	1084763
999562	1084582
999559	1084402
999555	1084222
999551	1084043
999548	1083865
999544	1083687
999540	1083510
999537	1083334
999533	1083159
999529	1082984
999525	1082810
999522	1082636
999518	1082463
999514	1082291
999510	1082120
999507	1081949
999503	1081778
999499	1081609
999495	1081440
999491	1081271
999487	1081104
999483	1080937
999479	1080770
999475	1080604
999471	1080439
999467	1080274
999463	1080110

Sin. 9	Tang. 9	
1	919512	920052
3	919671	920215
5	919830	920378
7	919987	920540
9	920145	920701
11	920301	920861
13	920457	921022
15	920613	921181
17	920767	921340
19	920922	921498
21	921075	921656
23	921229	921814
25	921381	921970
27	921533	922127
29	921685	922282
31	921836	922438
33	921986	922592
35	922136	922747
37	922286	922900
39	922434	923053
41	922583	923206
43	922731	923358
45	922878	923510
47	923025	923661
49	923171	923812
51	923317	923962
53	923462	924111
55	923607	924261
57	923751	924409
59	923895	924557

Sin. 80	Tang. 80	
999459	1079947	59
999455	1079784	57
999451	1079621	55
999447	1079459	53
999443	1079298	51
999439	1079138	49
999435	1078977	47
999431	1078818	45
999427	1078659	43
999423	1078501	41
999419	1078343	39
999414	1078185	37
999410	1078029	35
999406	1077872	33
999402	1077717	31
999398	1077561	29
999393	1077407	27
999389	1077252	25
999385	1077099	23
999381	1076946	21
999376	1076793	19
999372	1076641	17
999368	1076489	15
999363	1076338	13
999359	1076187	11
999355	1076037	9
999350	1075888	7
999346	1075738	5
999341	1075590	3
999337	1075442	1

Sin. 10	Tang. 10	
1	924038	924705
3	924181	924852
5	924323	924999
7	924465	925146
9	924606	925292
11	924747	925437
13	924888	925582
15	925028	925726
17	925167	925870
19	925306	926014
21	925445	926157
23	925583	926300
25	925721	926442
27	925858	926584
29	925995	926726
31	926131	926867
33	926267	927007
35	926402	927147
37	926537	927287
39	926672	927426
41	926806	927565
43	926940	927704
45	927073	927842
47	927206	927980
49	927338	928117
51	927470	928254
53	927602	928390
55	927733	928526
57	927864	928662
59	927994	928797

Sin. 79	Tang. 79	
999332	1075294	59
999328	1075147	57
999323	1075000	55
999319	1074853	53
999314	1074707	51
999310	1074562	49
999305	1074417	47
999301	1074273	45
999296	1074129	43
999292	1073985	41
999287	1073842	39
999282	1073699	37
999278	1073557	35
999273	1073415	33
999268	1073273	31
999264	1073132	29
999259	1072992	27
999254	1072852	25
999250	1072712	23
999245	1072573	21
999240	1072434	19
999235	1072295	17
999231	1072157	15
999226	1072019	13
999221	1071882	11
999216	1071745	9
999211	1071609	7
999206	1071473	5
999202	1071327	3
999197	1071202	1

Sin. 11	Tang. 11	
1	928124	928932
3	928254	929067
5	928383	929201
7	928512	929334
9	928640	929468
11	928768	929601
13	928896	929733
15	929023	929866
17	929150	929998
19	929276	930129
21	929402	930260
23	929528	930391
25	929653	930521
27	929778	930651
29	929903	930781
31	930027	930910
33	930151	931039
35	930274	931168
37	930397	931296
39	930520	931424
41	930643	931552
43	930765	931679
45	930886	931806
47	931007	931932
49	931128	932059
51	931249	932185
53	931369	932310
55	931489	932435
57	931609	932560
59	931728	932685

Sin. 78	Tang. 78	
999192	1071067	59
999187	1070932	57
999182	1070798	55
999177	1070665	53
999172	1070531	51
999167	1070398	49
999162	1070266	47
999157	1070133	45
999152	1070001	43
999147	1069870	41
999142	1069739	39
999137	1069608	37
999132	1069478	35
999126	1069348	33
999121	1069218	31
999116	1069089	29
999111	1068960	27
999106	1068831	25
999101	1068703	23
999095	1068575	21
999090	1068447	19
999085	1068320	17
999080	1068193	15
999075	1068067	13
999069	1067940	11
999064	1067814	9
999059	1067689	7
999053	1067564	5
999048	1067439	3
999043	1067314	1

Sin. 12	Tang. 12	
1	931847	932809
3	931965	932933
5	932084	933057
7	932201	933180
9	932319	933303
11	932436	933425
13	932553	933546
15	932669	933670
17	932786	933791
19	932902	933913
21	933017	934034
23	933132	934055
25	933247	934275
27	933362	934395
29	933476	934515
31	933590	934635
33	933704	934754
35	933817	934873
37	933930	934992
39	934043	935110
41	934155	935228
43	934267	935346
45	934379	935464
47	934491	935581
49	934602	935698
51	934713	935814
53	934823	935931
55	934934	936047
57	935044	936163
59	935154	936278

Sin. 77	Tang. 77	
999037	1067190	59
999032	1067066	57
999026	1066942	55
999021	1066819	53
999016	1066696	51
999010	1066574	49
999005	1066451	47
998999	1066329	45
998994	1066208	43
998988	1066086	41
998983	1065965	39
998977	1065844	37
998972	1065724	35
998966	1065604	33
998960	1065484	31
998955	1065364	29
998949	1065245	27
998944	1065126	25
998938	1065007	23
998932	1064889	21
998927	1064771	19
998921	1064653	17
998915	1064535	15
998909	1064418	13
998904	1064301	11
998898	1064185	9
998892	1064068	7
998886	1063952	5
998881	1063836	3
998875	1063721	1

Sin. 13	Tang. 13	
1	935263	936394
3	935372	936509
5	935481	936623
7	935590	936738
9	935698	936852
11	935806	936966
13	935914	937079
15	936021	937193
17	936128	937306
19	936235	937419
21	936342	937531
23	936448	937644
25	936554	937756
27	936660	937868
29	936765	937979
31	936871	938090
33	936976	938202
35	937080	938312
37	937185	938423
39	937289	938533
41	937393	938643
43	937396	938753
45	937600	938863
47	937703	938972
49	937806	939081
51	937908	939190
53	938011	939298
55	938113	939407
57	938215	939515
59	938316	939623

Sin. 76	Tang. 76	
998869	1063605	59
998863	1063490	57
998857	1063376	55
998851	1063261	53
998845	1063147	51
998840	1063033	49
998834	1062920	47
998828	1062806	45
998822	1062693	43
998816	1062580	41
998810	1062468	39
998804	1062355	37
998798	1062243	35
998792	1062131	33
998786	1062020	31
998780	1061909	29
998774	1061797	27
998767	1061687	25
998761	1061576	23
998755	1061466	21
998749	1061356	19
998743	1061246	17
998737	1061136	15
998731	1061027	13
998724	1060918	11
998718	1060809	9
998712	1060701	7
998706	1060592	5
998699	1060484	3
998693	1060376	1

Sin. 14	Tang. 14	
1	938418	939730
3	938519	939838
5	938620	939945
7	938720	940052
9	938821	940159
11	938921	940265
13	939020	940371
15	939120	940477
17	939219	940583
19	939319	940689
21	939417	940794
23	939516	940899
25	939614	941004
27	939713	941109
29	939811	941213
31	939908	941317
33	940006	941421
35	940103	941525
37	940200	941629
39	940297	941732
41	940393	941835
43	940490	941938
45	940586	942041
47	940682	942143
49	940777	942246
51	940873	942348
53	940968	942450
55	941063	942551
57	941157	942653
59	941252	942754

Sin. 75	Tang. 75	
998687	1060269	59
998680	1060161	57
998674	1060054	55
998668	1059947	53
998661	1059840	51
998655	1059734	49
998649	1059628	47
998642	1059522	45
998636	1059416	43
998629	1059310	41
998623	1059205	39
998616	1059100	37
998610	1058995	35
998603	1058890	33
998597	1058786	31
998590	1058682	29
998584	1058578	27
998577	1058474	25
998571	1058370	23
998564	1058267	21
998557	1058164	19
998551	1058061	17
998544	1057958	15
998538	1057856	13
998531	1057753	11
998524	1057651	9
998517	1057549	7
998511	1057448	5
998504	1057346	3
998497	1057245	1

Sin. 15	Tang. 15	
1	941346	942855
3	941440	942956
5	941534	943057
7	941628	943117
9	941721	943257
11	941814	943358
13	941907	943457
15	942000	943557
17	942093	943657
19	942185	943756
21	942277	943855
23	942369	943954
25	942461	944052
27	942552	944151
29	942644	944249
31	942735	944347
33	942826	944445
35	942917	944543
37	943007	944641
39	943097	944738
41	943187	944835
43	943277	944932
45	943367	945029
47	943456	945126
49	943546	945222
51	943635	945318
53	943724	945414
55	943812	945510
57	943901	945606
59	943989	945701

Sin. 74	Tan. 74	
998490	1057144	59
998484	1057043	57
998477	1056942	55
998470	1056842	53
998463	1056742	51
998456	1056641	49
998450	1056542	47
998443	1056442	45
998436	1056342	43
998429	1056243	41
998422	1056144	39
998415	1056045	37
998408	1055947	35
998401	1055848	33
998394	1055750	31
998387	1055652	29
998380	1055554	27
998373	1055456	25
998366	1055358	23
998359	1055261	21
998352	1055164	19
998345	1055067	17
998338	1054970	15
998330	1054873	13
998323	1054777	11
998316	1054681	9
998309	1054585	7
998302	1054489	5
998295	1054393	3
998287	1054298	1

Sin. 16	Tang. 16	
1	944077	945797
3	944165	945892
5	944253	945987
7	944341	946082
9	944428	946176
11	944515	946271
13	944602	946365
15	944689	946459
17	944775	946553
19	944862	946647
21	944948	946741
23	945034	946834
25	945120	946928
27	945206	947021
29	945291	947114
31	945376	947206
33	945461	947299
35	945546	947391
37	945631	947484
39	945716	947576
41	945800	947668
43	945884	947760
45	945968	947851
47	946052	947943
49	946136	948034
51	946219	948125
53	946303	948216
55	946386	948307
57	946469	948398
59	946552	948488

Sin. 73	Tang. 73	
998280	1054202	59
998273	1054107	57
998266	1054012	55
998258	1053917	53
998251	1053823	51
998244	1053728	49
998236	1053634	47
998229	1053540	45
998222	1053446	43
998214	1053352	41
998207	1053258	39
998199	1053165	37
998192	1053071	35
998184	1052978	33
998177	1052885	31
998169	1052793	29
998162	1052700	27
998154	1052608	25
998147	1052515	23
998139	1052423	21
998132	1052331	19
998124	1052239	17
998117	1052148	15
998109	1052056	13
998101	1051965	11
998094	1051874	9
998086	1051783	7
998078	1051692	5
998071	1051601	3
998063	1051511	1

	Sin. 17 Tang. 17		Sin. 72 Tang. 72		
1	946634	948579	998055	1051420	59
3	946717	948669	998048	1051330	57
5	946799	948759	998040	1051240	55
7	946881	948849	998032	1051150	53
9	946963	948938	998024	1051061	51
11	947045	949028	998016	1050971	49
13	947127	949118	998009	1050881	47
15	947208	949207	998001	1050792	45
17	947289	949296	997993	1050703	43
19	947370	949385	997985	1050614	41
21	947451	949474	997977	1050525	39
23	947532	949562	997969	1050437	37
25	947613	949651	997961	1050348	35
27	947693	949739	997953	1050260	33
29	947774	949828	997945	1050171	31
31	947854	949916	997937	1050083	29
33	947934	950004	997929	1049995	27
35	948014	950092	997921	1049907	25
37	948093	950179	997913	1049820	23
39	948173	950267	997905	1049732	21
41	948252	950354	997897	1049645	19
43	948331	950441	997889	1049558	17
45	948410	950528	997881	1049471	15
47	948489	950615	997873	1049384	13
49	948568	950702	997865	1049297	11
51	948646	950789	997857	1049010	9
53	948725	950875	997849	1049124	7
55	948803	950962	997841	1049037	5
57	948881	951048	997832	1048951	3
59	948959	951134	997824	1048865	1

Sin. 18	Tang. 18	
1	949037	951220
3	949114	951306
5	949192	951392
7	949269	951477
9	949346	951563
11	949423	951648
13	949500	951733
15	949577	951818
17	949653	951903
19	949730	951988
21	949806	952072
23	949882	952157
25	949958	952241
27	950034	952325
29	950109	952409
31	950185	952493
33	950260	952577
35	950335	952661
37	950411	952745
39	950485	952828
41	950560	952911
43	950635	952995
45	950709	953078
47	950784	953161
49	950858	953243
51	950932	953326
53	951006	953409
55	951080	953491
57	951153	953573
59	951227	953656

Sin. 71	Tang. 71	
997816	1048779	69
997808	1048693	67
997800	1048607	65
997791	1048522	63
997783	1048436	61
997775	1048351	59
997766	1048266	57
997758	1048181	55
997750	1048096	53
997741	1048011	51
997733	1047927	49
997725	1047842	47
997716	1047758	45
997708	1047673	43
997699	1047590	41
997691	1047506	39
997682	1047422	37
997674	1047338	35
997665	1047254	33
997657	1047171	31
997648	1047088	29
997640	1047004	27
997631	1046921	25
997623	1046838	23
997614	1046756	21
997605	1046673	19
997597	1046590	17
997588	1046508	15
997580	1046426	13
997571	1046343	11

Sin. 17	Tang. 17		Sin. 72	Tang. 72	
1	946634	948579	998055	1051420	59
3	946717	948669	998048	1051330	57
5	946799	948759	998040	1051240	55
7	946881	948849	998032	1051150	53
9	946963	948938	998024	1051061	51
11	947045	949028	998016	1050971	49
13	947127	949118	998009	1050881	47
15	947208	949207	998001	1050792	45
17	947289	949296	997993	1050703	43
19	947370	949385	997985	1050614	41
21	947451	949474	997977	1050525	39
23	947532	949562	997969	1050437	37
25	947613	949651	997961	1050348	35
27	947693	949739	997953	1050260	33
29	947774	949828	997945	1050171	31
31	947854	949916	997937	1050083	29
33	947934	950004	997929	1049995	27
35	948014	950092	997921	1049907	25
37	948093	950179	997913	1049820	23
39	948173	950267	997905	1049732	21
41	948252	950354	997897	1049645	19
43	948331	950441	997889	1049558	17
45	948410	950528	997881	1049471	15
47	948489	950615	997873	1049384	13
49	948568	950702	997865	1049297	11
51	948646	950789	997857	1049010	9
53	948725	950875	997849	1049124	7
55	948803	950962	997841	1049037	5
57	948881	951048	997832	1048951	3
59	948959	951134	997824	1048865	1

	Sin. 18	Tang. 18		Sin. 71	Tang. 71	
1	949037	951220		997816	1048779	89
3	949114	951306		997808	1048693	87
5	949192	951392		997800	1048607	85
7	949269	951477		997791	1048522	83
9	949346	951563		997783	1048436	81
11	949423	951648		997775	1048351	79
13	949500	951733		997766	1048266	77
15	949577	951818		997758	1048181	75
17	949653	951903		997750	1048096	73
19	949730	951988		997741	1048011	71
21	949806	952072		997733	1047927	69
23	949882	952157		997725	1047842	67
25	949958	952241		997716	1047758	65
27	950034	952325		997708	1047674	63
29	950109	952409		997699	1047590	61
31	950185	952493		997691	1047506	59
33	950260	952577		997682	1047422	57
35	950335	952661		997674	1047338	55
37	950411	952745		997665	1047254	53
39	950485	952828		997657	1047171	51
41	950560	952911		997648	1047088	49
43	950635	952995		997640	1047004	47
45	950709	953078		997631	1046921	45
47	950784	953161		997623	1046838	43
49	950858	953243		997614	1046756	41
51	950932	953326		997605	1046673	9
53	951006	953409		997597	1046590	7
55	951080	953491		997588	1046508	5
57	951153	953573		997580	1046426	3
59	951227	953656		997571	1046343	1

Sin. 19	Tang. 19	
1	951300	953738
3	951374	953820
5	951447	953902
7	951520	953983
9	951592	954065
11	951665	954146
13	951738	954228
15	951810	954309
17	951882	954390
19	951955	954471
21	952027	954552
23	952098	954633
25	952170	954713
27	952242	954794
29	952313	954874
31	952385	954955
33	952456	955035
35	952527	955115
37	952598	955195
39	952669	955275
41	952739	955354
43	952810	955434
45	952880	955513
47	952951	955593
49	953021	955672
51	953091	955751
53	953161	955830
55	953231	955909
57	953300	955988
59	953370	956067

Sin. 70	Tang. 70	
997562	1046261	5
997553	1046179	57
997545	1046098	55
997536	1046016	53
997527	1045934	51
997518	1045853	49
997510	1045771	47
997501	1045690	45
997492	1045609	43
997483	1045528	41
997474	1045447	39
997465	1045366	37
997456	1045280	35
997448	1045205	33
997439	1045125	31
997430	1045044	29
997421	1044904	27
997412	1044884	25
997403	1044804	23
997394	1044724	21
997385	1044645	19
997376	1044565	17
997367	1044486	15
997358	1044406	13
997348	1044327	11
997339	1044248	9
997330	1044169	7
997321	1044090	5
997312	1044011	3
997303	1043932	1

Sin. 20	Tang. 20	
1	953439	956145
3	953509	956224
5	953578	956302
7	953647	956381
9	953716	956459
11	953785	956537
13	953853	956615
15	953922	956693
17	953990	956770
19	954059	956848
21	954127	956926
23	954195	957003
25	954263	957080
27	954331	957158
29	954398	957235
31	954466	957312
33	954533	957389
35	954601	957466
37	954668	957542
39	954735	957619
41	954802	957695
43	954869	957772
45	954936	957848
47	955002	957924
49	955069	958000
51	955135	958076
53	955201	958152
55	955268	958228
57	955334	958304
59	955399	958379

Sin. 69	Tang. 69	
997293	1043854	59
997284	1043775	57
997275	1043697	55
997266	1043618	53
997257	1043540	51
997247	1043462	49
997238	1043384	47
997229	1043306	45
997219	1043229	43
997210	1043151	41
997201	1043073	39
997191	1042996	37
997182	1042919	35
997172	1042841	33
997163	1042764	31
997154	1042687	29
997144	1042610	27
997135	1042533	25
997125	1042457	23
997116	1042380	21
997106	1042304	19
997097	1042227	17
997087	1042151	15
997077	1042075	13
997068	1041999	11
997050	1041923	9
997049	1041847	7
997039	1041771	5
997029	1041695	3
997020	1041620	1

Sin. 21	Tang. 21	
1	955465	958455
3	955531	958530
5	955597	958606
7	955662	958681
9	955727	958756
11	955793	958831
13	955858	958906
15	955923	958981
17	955988	959056
19	956053	959130
21	956117	959205
23	956182	959279
25	956246	959354
27	956311	959428
29	956375	959502
31	956439	959576
33	956503	959650
35	956567	959724
37	956631	959798
39	956695	959872
41	956758	959945
43	956822	960019
45	956885	960092
47	956948	960166
49	957012	960239
51	957075	960312
53	957138	960385
55	957200	960458
57	957263	960537
59	957326	960604

Sin. 68	Tang. 68	
997010	1041544	59
997000	1041469	57
996990	1041393	55
996981	1041318	53
996971	1041243	51
996961	1041168	49
996951	1041093	47
996941	1041018	45
996932	1040943	43
996922	1040869	41
996912	1040794	39
996902	1040720	37
996892	1040645	35
996882	1040571	33
996872	1040497	31
996862	1040423	29
996852	1040349	27
996842	1040275	25
996832	1040201	23
996822	1040127	21
996812	1040054	19
996802	1039980	17
996792	1039907	15
996782	1039833	13
996772	1039760	11
996762	1039687	9
996752	1039614	7
996742	1039541	5
996731	1039468	3
996721	1039395	1

Sin. 22	Tang. 22	
1	957388	960677
3	957451	960749
5	957513	960822
7	957575	960895
9	957637	960967
11	957699	961039
13	957761	961111
15	957823	961184
17	957885	961256
19	957946	961328
21	958008	961400
23	958069	961471
25	958131	961543
27	958192	961615
29	958253	961686
31	958314	961758
33	958375	961829
35	958436	961900
37	958496	961972
39	958557	962043
41	958617	962114
43	958678	962185
45	958738	962256
47	958798	962326
49	958858	962397
51	958918	962468
53	958978	962538
55	959038	962609
57	959098	962679
59	959158	962750

Sin. 67	Tang. 67	
996711	1039322	59
996701	1039250	57
996691	1039177	55
996680	1039104	53
996670	1039032	51
996660	1038960	49
996649	1038888	47
996639	1038815	45
996629	1038743	43
996618	1038671	41
996608	1038600	39
996598	1038528	37
996587	1038456	35
996577	1038384	33
996566	1038313	31
996556	1038241	29
996545	1038170	27
996535	1038099	25
996524	1038027	23
996514	1037956	21
996503	1037885	19
996493	1037814	17
996482	1037743	15
996471	1037673	13
996461	1037602	11
996450	1037531	9
996440	1037461	7
996429	1037390	5
996418	1037320	3
996407	1037249	1

Sin. 23	Tang. 23	
1	959217	962820
3	959276	962890
5	959336	962960
7	959395	963030
9	959454	963100
11	959513	963170
13	959572	963240
15	959631	963309
17	959690	963379
19	959748	963449
21	959807	963518
23	959866	963587
25	959924	963657
27	959982	963726
29	960040	963795
31	960099	963864
33	960157	963933
35	960214	964002
37	960272	964071
39	960330	964140
41	960388	964209
43	960445	964277
45	960503	964346
47	960560	964414
49	960617	964483
51	960675	964551
53	960732	964619
55	960789	964688
57	960846	964756
59	960902	964824

Sin. 66	Tang. 66	
996397	1037172	59
996386	1037109	57
996375	1037039	55
996364	1036969	53
996354	1036899	51
996343	1036829	49
996332	1036759	47
996321	1036690	45
996310	1036620	43
996299	1036550	41
996289	1036481	39
996278	1036412	37
996267	1036342	35
996256	1036273	33
996245	1036204	31
996234	1036135	29
996223	1036066	27
996212	1035997	25
996201	1035928	23
996190	1035859	21
996179	1035790	19
996167	1035722	17
996156	1035653	15
996145	1035585	13
996134	1035516	11
996123	1035448	9
996112	1035380	7
996101	1035311	5
996089	1035243	3
996078	1035175	1

Sin. 24	Tang. 24		Sin. 65	Tang. 65	
1	960959	964892	996067	1035107	59
3	961016	964960	996056	1035039	57
5	961072	965028	996044	1034971	55
7	961129	965095	996033	1034904	53
9	961185	965163	996022	1034836	51
11	961242	965231	996010	1034768	49
13	961298	965298	995999	1034701	47
15	961354	965366	995988	1034633	45
17	961410	965433	995976	1034566	43
19	961466	965501	995965	1034498	41
21	961522	965568	995953	1034431	39
23	961578	965635	995942	1034364	37
25	961633	965702	995931	1034297	35
27	961689	965769	995919	1034230	33
29	961744	965836	995908	1034163	31
31	961800	965903	995896	1034096	29
33	961855	965970	995885	1034029	27
35	961911	966037	995873	1033962	25
37	961966	966104	995861	1033895	23
39	962021	966171	995850	1033828	21
41	962076	966237	995838	1033762	19
43	962131	966304	995827	1033695	17
45	962186	966370	995815	1033629	15
47	962240	966437	995803	1033562	13
49	962295	966503	995792	1033496	11
51	962350	966569	995780	1033430	9
53	962404	966635	995768	1033364	7
55	962459	966702	995756	1033297	5
57	962513	966768	995745	1033231	3
59	962567	966834	995733	1033165	1

Sin. 25	Tang. 25	
1	962621	966900
3	962676	966966
5	962730	967031
7	962783	967097
9	962837	967163
11	962891	967229
13	962945	967294
15	962998	967360
17	963052	967425
19	963105	967491
21	963159	967556
23	963212	967621
25	963265	967686
27	963318	967752
29	963371	967817
31	963424	967882
33	963477	967947
35	963530	968011
37	963583	968076
39	963636	968141
41	963688	968206
43	963741	968270
45	963793	968335
47	963845	968400
49	963898	968464
51	963950	968529
53	964002	968593
55	964054	968657
57	964106	968721
59	964158	968786

Sin. 64	Tang. 64	
995721	1033099	59
995709	1033033	57
995698	1032968	55
995686	1032902	53
995674	1032836	51
995662	1032770	49
995650	1032705	47
995638	1032639	45
995626	1032574	43
995614	1032508	41
995602	1032443	39
995590	1032378	37
995578	1032313	35
995566	1032247	33
995554	1032182	31
995542	1032117	29
995530	1032052	27
995518	1031988	25
995506	1031923	23
995494	1031858	21
995482	1031793	19
995470	1031729	17
995457	1031664	15
995445	1031599	13
995433	1031535	11
995421	1031470	9
995409	1031406	7
995396	1031342	5
995384	1031278	3
995372	1031213	1

Sin. 26	Tang. 26	
1	964210	968850
3	964261	968914
5	964313	968978
7	964365	969042
9	964416	969106
11	964467	969169
13	964519	669633
15	964570	969297
17	964621	969361
19	964672	969424
21	964723	969488
23	964774	969551
25	964825	969615
27	964876	969678
29	964927	969741
31	964978	969805
33	965028	969868
35	965079	966931
37	965129	969994
39	965180	970057
41	965230	970120
43	965280	970183
45	965330	970246
47	965380	970309
49	965430	970372
51	965480	970434
53	965530	970497
55	965580	970560
57	965630	970622
59	965679	970685

Sin. 63	Tang. 63	
995359	1031149	59
995347	1031085	57
995335	1031021	55
995322	1030957	53
995310	1030893	51
995297	1030830	49
995285	1030766	47
995273	1030702	45
995260	1030638	43
995248	1030575	41
995235	1030511	39
995223	1030448	37
995210	1030384	35
995197	1030321	33
995185	1030258	31
995172	1030194	29
995160	1030131	27
995147	1030068	25
995134	1030005	23
995122	1029942	21
995109	1029879	19
995096	1029816	17
995084	1029753	15
995071	1029690	13
995058	1029627	11
995045	1029565	9
995033	1029502	7
995020	1029439	5
995007	1029377	3
994994	1029314	1

Sin. 27	Tang. 27	
1	965729	970747
3	965778	970810
5	965828	970872
7	965877	970934
9	965927	970997
11	965976	971059
13	966025	971121
15	966074	971183
17	966123	971245
19	966172	971307
21	966221	971369
23	966270	971431
25	966319	971493
27	966367	971555
29	966416	971616
31	966464	971678
33	966513	971740
35	966561	971801
37	966610	971863
39	966658	971924
41	966706	971986
43	966754	972047
45	956802	972108
47	966850	972170
49	966898	972231
51	966946	972292
53	966994	972353
55	967041	972414
57	967089	972475
59	967137	972536

Sin. 62	Tang. 62	
994981	1029252	59
994968	1029189	57
994955	1029127	55
994942	1029065	53
994929	1029002	51
994917	1028940	49
994904	1028878	47
994891	1028816	45
994877	1028754	43
994864	1028692	41
994851	1028630	39
994838	1028568	37
994825	1028506	35
994812	1028444	33
994799	1028383	31
994786	1028321	29
994773	1028259	27
994759	1028198	25
994746	1028136	23
994733	1028075	21
994720	1028013	19
994707	1027952	17
994693	1027891	15
994680	1027829	13
994667	1027768	11
994653	1027707	9
994640	1027646	7
994627	1027585	5
994613	1027524	3
994600	1027463	1

Sin. 28	Tang. 28	
1	967184	972597
3	967232	972658
5	967279	972719
7	967326	972780
9	967374	972841
11	967421	972901
13	967468	972962
15	967515	973023
17	967562	973083
19	967609	973144
21	967656	973204
23	967703	973265
25	967749	973325
27	967796	973386
29	967843	973446
31	967889	973506
33	967936	973566
35	967982	973626
37	968028	973687
39	968075	973747
41	968121	973807
43	968167	973867
45	968213	973927
47	968259	973986
49	968305	974046
51	968351	974106
53	968397	974165
55	968442	974226
57	968488	974285
59	968534	974345

Sin. 61	Tang. 61	
994586	1027402	59
994573	1027341	57
994559	1027280	55
994546	1027219	53
994532	1027158	51
994519	1027098	49
994505	1027037	47
994492	1026976	45
994478	1026916	43
994465	1026855	41
994451	1026795	39
994437	1026734	37
994424	1026674	35
994410	1026613	33
994396	1026553	31
994382	1026493	29
994369	1026433	27
994355	1026373	25
994341	1026312	23
994327	1026252	21
994314	1026192	19
994300	1026132	17
994286	1026072	15
994272	1026013	13
994258	1025953	11
994244	1025893	9
994230	1025833	7
994216	1025773	5
994202	1025714	3
994188	1025654	1

Sin. 29	Tang. 29	
1	968579	974404
3	968625	974464
5	968670	974524
7	968716	974583
9	968761	974642
11	968806	974702
13	968852	974761
15	968897	974820
17	968942	974880
19	968987	974939
21	969032	974998
23	969077	975057
25	969122	975116
27	969166	975175
29	969211	975234
31	969256	975293
33	969300	975352
35	969345	975411
37	969389	975470
39	969434	975529
41	969478	975587
43	969522	975646
45	969567	975705
47	969611	975763
49	969655	975822
51	969699	975880
53	969743	975939
55	969787	975997
57	969831	976056
59	969875	976114

Sin. 60	Tang. 60	
994174	1025595	59
994160	1025535	57
994146	1025475	55
994132	1025416	53
994118	1025357	51
994104	1025297	49
994090	1025238	47
994076	1025179	45
994062	1025119	43
994048	1025060	41
994033	1025001	39
994019	1024942	37
994005	1024883	35
993991	1024824	33
993976	1024765	31
993962	1024706	29
993948	1024647	27
993933	1024588	25
993919	1024529	23
993905	1024470	21
993890	1024412	19
993876	1024353	17
993861	1024294	15
993847	1024236	13
993832	1024177	11
993818	1024119	9
993804	1024060	7
993789	1024002	5
993774	1023943	3
993760	1023885	1

Sin. 30	Tang. 30		Sin. 59	Tang. 59	
969918	976173		993745	1023826	59
969962	976231		993731	1023768	57
970005	976289		993716	1023710	55
970049	976347		993701	1023652	53
970093	976406		993687	1023593	51
970136	976464		993672	1023535	49
970180	976522		993657	1023477	47
970223	976580		993643	1023419	45
970266	976638		993628	1023361	43
970310	976696		993613	1023303	41
970353	976754		993598	1023245	39
970396	976812		993584	1023187	37
970439	976870		993569	1023129	35
970482	976928		993554	1023071	33
970525	976985		993539	1023014	31
970568	977043		993524	1022956	29
970611	977101		993509	1022898	27
970653	977159		993494	1022840	25
970696	977216		993479	1022783	23
970739	977274		993464	1022725	21
970781	977332		993449	1022667	19
970824	977389		993434	1022610	17
970866	977447		993419	1022552	15
970909	977504		993404	1022495	13
970951	977562		993389	1022437	11
970994	977619		993374	1022380	9
971035	977676		993359	1022323	7
971078	977734		993344	1022265	5
971120	977791		993329	1022208	3
971162	977848		993314	1022151	1

Sin. 31	Tang. 31	
1	971204	977905
3	971246	977963
5	971288	978020
7	971330	978077
9	971372	978134
11	971414	978191
13	971456	978248
15	971497	978305
17	971539	978362
19	971580	978419
21	971622	978476
23	971663	978533
25	971705	978590
27	971746	978646
29	971787	978703
31	971829	978760
33	971870	978816
35	971911	978873
37	971952	978930
39	971993	978986
41	972034	979043
43	972075	979099
45	972116	979156
47	972157	979212
49	972197	979269
51	972238	979325
53	972279	979381
55	972319	979438
57	972360	979494
59	972400	979550

Sin. 58	Tang. 58	
993298	1022094	59
993283	1022036	57
993268	1021979	55
993253	1021922	53
993238	1021865	51
993222	1021808	49
993207	1021751	47
993192	1021694	45
993176	1021638	43
993161	1021580	41
993146	1021523	39
993130	1021466	37
993115	1021409	35
993099	1021353	33
993084	1021296	31
993068	1021239	29
993053	1021183	27
993037	1021126	25
993022	1021069	23
993006	1021013	21
992991	1020956	19
992975	1020900	17
992959	1020843	15
992944	1020787	13
992928	1020730	11
992912	1020674	9
992897	1020618	7
992881	1020561	5
992865	1020505	3
992849	1020449	1

Sin. 32	Tang. 32	
1	972441	979607
3	972481	979663
5	972521	979719
7	972562	979775
9	972602	979831
11	972642	979887
13	972682	979943
15	972722	979999
17	972762	980055
19	972802	980111
21	972842	980167
23	972882	980223
25	972922	980279
27	972962	980335
29	973001	980390
31	973041	980446
33	973081	980502
35	973120	980558
37	973160	980613
39	973199	980669
41	973239	980724
43	973278	980780
45	973317	980836
47	973356	980891
49	973396	980947
51	973435	981002
53	973474	981057
55	973513	981113
57	973552	981168
59	973591	981224

Sin. 57	Tang. 57	
992834	1020392	59
992818	1020336	57
992802	1020280	55
992786	1020224	53
992770	1020168	51
992754	1020112	49
992738	1020056	47
992723	1020000	45
992707	1019944	43
992691	1019888	41
992675	1019832	39
992659	1019776	37
992643	1019720	35
992627	1019664	33
992610	1019609	31
992594	1019553	29
992578	1019497	27
992562	1019441	25
992546	1019386	23
992530	1019330	21
992514	1019275	19
992497	1019219	17
992481	1019163	15
992465	1019108	13
992449	1019052	11
992432	1018997	9
992416	1018942	7
992400	1018886	5
992383	1018831	3
992367	1018775	1

Sin. 33	Tang. 33	
1	973630	981279
3	973669	981334
5	973707	981389
7	973746	981445
9	973785	981500
11	973824	981555
13	973862	981610
15	973901	981665
17	973939	981720
19	973978	981775
21	974016	981830
23	974055	981885
25	974093	981940
27	974131	981995
29	974169	982050
31	974208	982105
33	974246	982160
35	974284	982215
37	974322	982270
39	974360	982325
41	974398	982379
43	974436	982434
45	974473	982489
47	974511	982543
49	974549	982598
51	974587	982653
53	974624	982707
55	974662	982762
57	974699	982816
59	974737	982871

Sin. 56	Tang. 56	
992350	1018720	59
992334	1018665	57
992318	1018610	55
992301	1018554	53
992285	1018499	51
992268	1018444	49
992252	1018389	47
992235	1018334	45
992218	1018279	43
992202	1018224	41
992185	1018169	39
992169	1018114	37
992152	1018059	35
992135	1018004	33
992119	1017949	31
992012	1017894	29
992085	1017839	27
992068	1017784	25
992051	1017729	23
992035	1017674	21
992018	1017620	19
992001	1017565	17
991984	1017510	15
991967	1017456	13
991950	1017401	11
991933	1017346	9
991916	1017292	7
991899	1017237	5
991882	1017183	3
991865	1017128	1

Sin. 34	Tang. 34	
1	974774	982925
3	974812	982980
5	974849	983034
7	974886	983089
9	974924	983143
11	974961	983198
13	974998	983252
15	975035	983306
17	975072	983361
19	975109	983415
21	975146	983469
23	975183	983523
25	975220	983578
27	975257	983632
29	975294	983686
31	975331	983740
33	975367	983794
35	975404	983848
37	975441	983902
39	975477	983956
41	975514	984010
43	975550	984064
45	975587	984118
47	975623	984172
49	975659	984226
51	975696	984280
53	975732	984334
55	975768	984388
57	975804	984441
59	975841	984495

Sin. 55	Tang. 55
991848	1017074
991831	1017019
991814	1016965
991797	1016910
991780	1016856
991763	1016801
991746	1016747
991729	1016693
991711	1016638
991694	1016584
991677	1016530
991660	1016476
991642	101642
991625	101636
991608	101631
991590	101625
991573	101625
991555	101615
991538	101609
991521	101604
991503	101598
991486	101593
991468	101588
991450	101582
991433	101577
991415	101571
991398	101566
991380	101561
991362	101555
991345	101550

Sin. 35	Tang. 35	
1	975877	984549
3	975913	984603
5	975949	984657
7	975985	984710
9	976021	984764
11	976056	984818
13	976092	984871
15	976128	984925
17	976164	984978
19	976199	985032
21	976235	985086
23	976271	985139
25	976306	985193
27	976342	985246
29	976377	985300
31	976413	985353
33	976448	985406
35	976483	985460
37	976519	985513
39	976554	985567
41	976589	985620
43	976624	985673
45	976659	985727
47	976694	985780
49	976729	985833
51	976764	985886
53	976799	985940
55	976834	985993
57	976869	986046
59	976904	986099

Sin. 54	Tang. 54	
991327	1015450	59
991309	1015396	57
991292	1015342	55
991274	1015289	53
991256	1015235	51
991238	1015181	49
991220	1015128	47
991203	1015074	45
991185	1015021	43
991167	1014967	41
991149	1014913	39
991131	1014860	37
991113	1014806	35
991095	1014753	33
991077	1014699	31
991059	1014646	29
991041	1014593	27
991023	1014539	25
991005	1014486	23
990987	1014432	21
990969	1014379	19
990950	1014326	17
990932	1014272	15
990914	1014219	13
990896	1014166	11
990878	1014113	9
990859	1014059	7
990841	1014006	5
990823	1013953	3
990804	1013900	1

Sin. 36	Tang. 36	
1	976939	986152
3	976973	986205
5	977008	986258
7	977043	986311
9	977077	986365
11	977112	986418
13	977147	986471
15	977181	986524
17	977215	986577
19	977250	986629
21	977284	986682
23	977318	986735
25	977353	986788
27	977387	986841
29	977421	986894
31	977455	986947
33	977489	987000
35	977523	987052
37	977558	987105
39	977591	987158
41	977625	987211
43	977659	987263
45	977693	987316
47	977727	987369
49	977761	987422
51	977795	987474
53	977828	987527
55	977862	987579
57	977895	987632
59	977929	987685

Sin. 53	Tang. 53	
990786	1013847	59
990768	1013794	57
990749	1013741	55
990731	1013688	53
990712	1013635	51
990694	1013581	49
990675	1013528	47
990657	1013475	45
990638	1013422	43
990620	1013370	41
990601	1013317	39
990583	1013264	37
990564	1013211	35
990545	1013158	33
990527	1013105	31
990508	1013052	29
990489	1012999	27
990471	1012947	25
990452	1012894	23
990433	1012841	21
990414	1012788	19
990395	1012736	17
990377	1012683	15
990358	1012630	13
990339	1012577	11
990320	1012525	9
990301	1012472	7
990282	1012420	5
990263	1012367	3
990244	1012314	1

Sin. 37	Tang. 37	
1	977963	987737
3	977996	987790
5	978030	987842
7	978063	987895
9	978096	987947
11	978130	988000
13	978163	988052
15	978196	988105
17	978229	988157
19	978263	988210
21	978296	988262
23	978329	988314
25	978362	988367
27	978395	988419
29	978428	988471
31	978461	988524
33	978494	988576
35	978526	988628
37	978559	988681
39	978592	988733
41	978625	988785
43	978657	988837
45	978690	988889
47	978723	988942
49	978755	988994
51	978788	989046
53	978820	989098
55	978853	989150
57	978885	989202
59	978918	989254

Sin. 52	Tang. 52	
990225	1012262	59
990206	1012209	57
990187	1012157	55
990168	1012104	53
990148	1012052	51
990129	1011999	49
990110	1011947	47
990091	1011894	45
990072	1011842	43
990052	1011789	41
990033	1011737	39
990014	1011685	37
989995	1011632	35
989975	1011580	33
989956	1011528	31
989936	1011475	29
989917	1011423	27
989898	1011371	25
989878	1011318	23
989859	1011266	21
989839	1011214	19
989820	1011162	17
989800	1011110	15
989781	1011057	13
989761	1011005	11
989741	1010953	9
989722	1010901	7
989702	1010849	5
989682	1010797	3
989663	1010745	1

Sin.38	Tang.38	
	978950	989307
	978982	989359
5	979014	989411
7	979047	989463
9	979079	989515
11	979111	989567
13	979143	989619
15	978175	989671
17	979207	989723
19	979239	989775
21	979271	989827
23	979303	989878
25	979335	989930
27	979367	989982
29	979399	990034
31	979430	990086
33	979462	990138
35	979494	990190
37	979525	990241
39	979557	990293
41	979589	990345
43	979620	990397
45	979652	990449
47	979683	990500
49	979715	990552
51	979746	990604
53	979777	990656
55	979809	990707
57	979840	990759
59	979871	990811

Sin. 51	Tang. 51	
989643	1010692	59
989623	1010640	57
989603	1010588	55
989583	1010536	53
989564	1010484	51
989544	1010432	49
989524	1010380	47
989504	1010328	45
989484	1010276	43
989464	1010224	41
989444	1010173	39
989424	1010121	37
989404	1010069	35
989384	1010017	33
989364	1009965	31
989344	1009913	29
989324	1009861	27
989304	1009809	25
989283	1009758	23
989263	1009706	21
989243	1009654	19
989223	1009602	17
989203	1009550	15
989182	1009499	13
989162	1009447	11
989142	1009395	9
989121	1009343	7
989101	1009292	5
989080	1009240	3
989060	1009188	1

Sin. 39	Tang. 39	
1	979902	990862
3	979913	990914
5	979925	990966
7	979990	991017
9	980027	991069
11	980058	991120
13	980089	991172
15	980120	991224
17	980151	991275
19	980181	991327
21	980212	991378
23	980243	991430
25	980274	991481
27	980305	991533
29	980335	991584
31	980366	991636
33	980396	991687
35	980427	991739
37	980458	991790
39	980488	991841
41	980519	991893
43	980549	991944
45	980579	991996
47	980610	992047
49	980640	992098
51	980670	992150
53	980701	992201
55	980731	992253
57	980761	992304
59	980791	992355

Sin. 50	Tang. 50	
989040	1009157	59
989019	1009085	57
988999	1009033	55
988978	1008982	53
988957	1008930	51
988937	1008879	49
988916	1008827	47
988896	1008775	45
988875	1008724	43
988854	1008672	41
988834	1008621	39
988813	1008569	37
988792	1008518	35
988771	1008466	33
988751	1008415	31
988730	1008363	29
988709	1008312	27
988688	1008260	25
988667	1008209	23
988646	1008158	21
988625	1008106	19
988604	1008055	17
988583	1008003	15
988562	1007952	13
988541	1007901	11
988520	1007849	9
988499	1007798	7
988478	1007746	5
988457	1007695	3
988435	1007644	1

Sin. 40	Tang. 40	
	980821	992407
	980851	992458
	980881	992509
	980911	992560
	980941	992612
1	980971	992663
3	981001	992714
5	981031	992765
7	981061	992817
9	981091	992868
11	681120	992919
13	981150	992970
15	981180	993021
17	981210	993073
19	981239	993124
21	981269	993175
23	981298	993226
25	981328	993277
27	981357	993328
29	981387	993380
41	981416	993431
43	981445	993482
45	981475	993533
47	981504	993584
49	981533	993635
51	981563	993686
53	981592	993737
55	981621	993788
57	981650	993839
59	981679	993890

Sin. 49	Tang. 49	
988414	1007592	59
988393	1007541	57
988372	1007490	55
988351	1007439	53
988329	1007387	51
988308	1007336	49
988287	1007285	47
988265	1007234	45
988244	1007182	43
988222	1007131	41
988201	1007080	39
988179	1007029	37
988158	1006978	35
988136	1006926	33
988115	1006875	31
988093	1006824	29
988072	1006773	27
988050	1006722	25
988028	1006671	23
988007	1006619	21
987985	1006568	19
987963	1006517	17
987941	1006466	15
987920	1006415	13
987898	1006364	11
987876	1006313	9
987854	1006262	7
987832	1006211	5
987810	1006160	3
987788	1006109	1

Sin. 41	Tang. 41	
1	981708	993941
3	981737	993992
5	981766	994043
7	981795	994094
9	981824	994145
11	981853	994196
13	981882	994247
15	981911	994298
17	981940	994349
19	981968	994400
21	981997	994451
23	982026	994502
25	982054	994553
27	982083	994604
29	982112	994655
31	982140	994706
33	982169	994757
35	982197	994808
37	982226	994858
39	982254	994909
41	982283	994960
43	982311	995011
45	982339	995062
47	982367	995113
49	982396	995164
51	982424	995215
53	982452	995265
55	982480	995316
57	982508	995367
59	982537	995418

Sin. 48	Tang. 48	
987767	1006058	59
987745	1006007	57
987722	1005956	55
987700	1005905	53
987678	1005854	51
987656	1005803	49
987634	1005752	47
987612	1005701	45
987590	1005650	43
987568	1005599	41
987545	1005548	39
987523	1005497	37
987501	1005446	35
987479	1005395	33
987456	1005344	31
987434	1005293	29
987412	1005242	27
987389	1005191	25
987367	1005141	23
987344	1005090	21
987322	1005039	19
987299	1004988	17
987277	1004937	15
987254	1004886	13
987232	1004835	11
987209	1004784	9
987186	1004734	7
987164	1004783	5
987141	1004632	3
987118	1004581	1

	Sin. 42	Tang. 42		Sin. 47	Tang. 47	
1	982565	995469		987091	1004530	59
3	982593	995519		987073	1004480	57
5	982621	995570		987050	1004429	55
7	982649	995621		987027	1004378	53
9	982677	995672		987004	1004327	51
11	982704	995723		986981	1004276	49
13	982732	995773		986958	1004226	47
15	982760	995824		986935	1004175	45
17	982788	995875		986913	1004124	43
19	982816	995926		986890	1004073	41
21	982843	995976		986867	1004023	39
23	982871	996027		986843	1003972	37
25	982899	996078		986820	1003921	35
27	982926	996129		986797	1003870	33
29	982954	996179		986774	1003820	31
31	982982	996230		986751	1003769	29
33	983009	996281		986728	1003718	27
35	983037	996332		986705	1003667	25
37	983064	996382		986681	1003617	23
39	983092	996433		986658	1003566	21
41	983119	996484		986635	1003515	19
43	983146	996534		986612	1003465	17
45	983174	996585		986588	1003414	15
47	983201	996636		986565	1003363	13
49	983228	996686		986541	1003313	11
51	983256	996737		986518	1003262	9
53	983283	996788		986495	1003211	7
55	983310	996838		986471	1003161	5
57	983337	996889		986448	1003110	3
59	983364	996940		986424	1003059	1

Sin. 43	Tang. 43	
1	983391	996990
3	983418	997041
5	983445	997092
7	983472	997142
9	983499	997193
11	983526	997244
13	983553	997294
15	983580	997345
17	983607	997396
19	983634	997446
21	983661	997497
23	983687	997547
25	983714	997593
27	983741	997649
29	983767	997699
31	983794	997750
33	983821	997800
35	983847	997851
37	983874	997902
39	983900	997952
41	983927	998003
43	983953	998053
45	983980	998104
47	984006	998155
49	984032	998205
51	984059	998256
53	984085	998306
55	984111	998357
57	984137	998407
59	984164	998458

Sin. 46	Tang. 46	
986400	1003009	59
986377	1002958	57
986353	1002907	55
986330	1002857	53
986306	1002806	51
986282	1002755	49
986259	1002705	47
986235	1002654	45
986211	1002603	43
986187	1002553	41
986163	1002502	39
986139	1002452	37
986116	1002401	35
986092	1002350	33
986068	1002300	31
986044	1002249	29
986020	1002199	27
985996	1002148	25
995972	1002097	23
985948	1002047	21
985923	1001996	19
985899	1001946	17
985875	1001895	15
985851	1001844	13
985827	1001794	11
985802	1001743	9
985778	1001693	7
985754	1001642	5
985729	1001592	3
985705	1001541	1

Sin. 44	Tang. 44	
1	984190	998509
3	984216	998559
5	984242	998610
7	984268	998660
9	984294	998711
11	984320	998761
13	984346	998812
15	984372	998862
17	984398	998913
19	984424	998963
21	984450	999014
23	984476	999065
25	984501	999115
27	984527	999166
29	984553	999216
31	984579	999267
33	984604	999317
35	984630	999368
37	984655	999418
39	984681	999469
41	984707	999519
43	984732	999570
45	984758	999621
47	984783	999671
49	984809	999722
51	984834	999772
53	984859	999823
55	984885	999873
57	984910	999924
59	984935	999974

Sin. 45	Tang. 45	
985681	1001491	59
985656	1001440	57
985632	1001389	55
985607	1001339	53
985583	1001288	51
985558	1001238	49
985534	1001187	47
985509	1001137	45
985484	1001086	43
985460	1001036	41
985435	1000985	39
985410	1000934	37
985386	1000884	35
985361	1000833	33
985336	1000783	31
985311	1000732	29
985286	1000682	27
985262	1000631	25
985237	1000581	23
985212	1000530	21
985187	1000480	19
985162	1000429	17
985137	1000378	15
985112	1000328	13
985087	1000277	11
985061	1000227	9
985036	1000176	7
985011	1000126	5
984986	1000075	3
984961	1000025	1

VSVS SEQVENTIS TABVLÆ LOGARITHMORVM.

Qui numeris absolutis respondent ad 1000 vsque.

Primò, Quære datum numerum quemlibet ad 1000 vsque in prima columna, & proximè è regione occurret Logarithmus eiusdem dati numeri absoluti.

EXEMPLVM.

Numerus absolutus 10. *Logarith.* 100000.

Numerus absolutus 3. *Logarith.* 047712.

Secundò, Quære datum Logarith. qui 300000 non sit maior, inter Logarithmos: qui ex aduerso proximè ad sinistram respondebit absolutus numerus pertinebit ad eundem Logarith.

EXEMPLVM.

Logarith. 100000. *Numerus absolutus.* 10.

Logarith. 047712. *Numerus absolutus.* 3.

Ex hac Tabula sumes latera triangulorum rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
1	000000	31	149136	61	178532
2	030102	32	150514	62	179239
3	047712	33	151851	63	179934
4	060205	34	153147	64	180617
5	069897	35	154406	65	181291
6	077815	36	155630	66	181954
7	084509	37	156820	67	182607
8	090308	38	157978	68	183250
9	095424	39	159106	69	183884
10	100000	40	160205	70	184509
11	104139	41	161278	71	185125
12	107918	42	162324	72	185733
13	111394	43	163346	73	186332
14	114612	44	164345	74	186923
15	117609	45	165321	75	187506
16	120411	46	166275	76	188081
17	123044	47	167209	77	188649
18	125527	48	168124	78	189209
19	127875	49	169019	79	189762
20	130102	50	169897	80	190308
21	132221	51	170757	81	190848
22	134242	52	171600	82	191381
23	136172	53	172427	83	191907
24	138021	54	173239	84	192427
25	139794	55	174036	85	192941
26	141497	56	174818	86	193449
27	143136	57	175587	87	193951
28	144715	58	176342	88	194448
29	146239	59	177085	89	194939
30	147712	60	177815	90	195424

N.	Logar.	N.	Logar.	N.	Logar.
1	195904	121	208278	151	217891
2	196378	122	208635	152	218184
3	196848	123	208990	153	218469
4	197312	124	209342	154	218752
5	197772	125	209691	155	219033
6	98227	126	210037	156	219312
7	198677	127	210380	157	219589
8	199122	128	210720	158	219865
9	199563	129	211058	159	220139
00	200000	130	211394	160	220411
01	200432	131	211727	161	220682
02	200860	132	212057	162	220951
03	201283	133	212385	163	221218
04	201703	134	212710	164	221484
105	202118	135	213033	165	221746
106	202530	136	213353	166	222010
107	202938	137	213672	167	222271
108	203342	138	213987	168	222530
109	203742	139	214301	169	222788
110	204139	140	214612	170	223044
111	204532	141	214921	171	223299
112	204921	142	215228	172	223552
113	205307	143	215533	173	223804
114	205690	144	215836	174	224054
115	206069	145	216136	175	224303
116	206445	146	216435	176	224551
167	206818	147	216731	177	224797
118	207188	148	217026	178	225042
119	207554	149	217318	179	225285
120	207918	150	217609	180	225527

Ex hac Tabula sumes latera triangulorum rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
181	225767	211	232428	241	238201
182	226007	212	232633	242	238381
183	226245	213	232837	243	238560
184	226481	214	233041	244	238738
185	226717	215	233243	245	238916
186	226951	216	233445	246	239093
187	227184	217	233645	247	239269
188	227415	218	233845	248	239445
189	227646	219	234044	249	239619
190	227875	220	234242	250	239794
191	228103	221	234439	251	239967
192	228330	222	234635	252	240140
193	228555	223	234830	253	240312
194	228780	224	235024	254	240483
195	229003	225	235218	255	240654
196	229225	226	235410	256	240823
197	229446	227	235602	257	240993
198	229666	228	235793	258	241161
199	229885	229	235983	259	241329
200	230102	230	236172	260	241497
201	230319	231	236361	261	241664
202	230535	232	236548	262	241830
203	230749	233	236735	263	241995
204	230963	234	236921	264	242160
205	231175	235	237106	265	242324
206	231386	236	237291	266	242488
207	231597	237	237474	267	242651
208	231806	238	237657	268	242813
209	232014	239	237839	269	242975
210	232221	240	238021	270	243136

Ex hac Tabula lumes latera triangularem rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
271	243296	301	247856	331	251932
272	243456	302	248000	332	252113
273	243616	303	248144	333	252241
274	243775	304	248287	334	252374
275	243933	305	248429	335	25250
276	244090	306	248572	336	252633
277	244247	307	248713	337	252762
278	244404	308	248855	338	252891
279	244560	309	248995	339	253019
280	244715	310	249136	340	253147
281	244870	311	249276	341	253275
282	245024	312	249415	342	253402
283	245178	313	249554	343	253529
284	245331	314	249692	344	253655
285	245484	315	249831	345	253781
286	245636	316	249968	346	253907
287	245788	317	250105	347	754032
288	245919	318	250242	348	254157
289	246089	319	250379	349	254282
290	246239	320	250514	350	254406
291	246389	321	250650	351	254530
292	246538	322	250785	352	254654
293	246686	323	250920	353	254777
294	246834	324	251054	354	254900
295	246982	325	251188	355	255022
296	247129	326	251321	356	255144
297	247275	327	251454	357	255266
298	247421	328	251587	358	255388
299	247567	329	251719	359	255509
300	247712	330	251851	360	255630

Ex hac Tabula sumes latera triangulorum rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
361	255750	391	259217	421	262428
362	255870	392	259328	422	262531
363	253990	393	259439	423	262634
364	256110	394	259549	424	262736
365	256229	395	259659	425	262838
366	256348	396	259769	426	262940
367	256466	397	259879	427	263042
368	256584	398	259988	428	263144
369	256702	399	260097	429	263245
370	256820	400	260205	430	263346
371	256937	401	260314	431	263447
372	257054	402	260422	432	263548
373	257170	403	260530	433	263648
374	257287	404	260638	434	263748
375	257403	405	260745	435	263848
376	257518	406	260852	436	263948
377	257634	407	260959	437	264048
378	257749	408	261066	438	264147
379	257863	409	261172	439	264246
380	257878	410	261278	440	264345
381	258092	411	261384	441	264443
382	258206	412	261489	442	264542
383	258319	413	261595	443	264640
384	258433	414	261700	444	264738
385	258546	415	261804	445	264836
386	258658	416	261909	446	264933
387	258771	417	262013	447	265030
388	258883	418	262117	448	265127
389	258994	419	262221	449	265224
390	259106	420	262324	450	265321

Ex hac Tabula sumes latera triangulorum rectilineorum

N.	Logar.	N.	Logar.	N.	Logar.
451	265417	481	268214	511	270842
452	265513	482	268304	512	270926
453	265609	483	268394	513	271011
454	265705	484	268484	514	271059
455	265801	485	268574	515	271180
456	265896	486	268663	516	271264
457	265991	487	268752	517	271349
458	266086	488	268841	518	271432
459	266181	489	268930	519	271516
460	266275	490	269019	520	271600
461	266370	491	269108	521	271683
462	266464	492	269196	522	271767
463	266558	493	269284	523	271850
464	266651	494	269372	524	272933
465	266745	495	269460	525	272015
466	266838	466	269548	526	272098
467	266931	497	269635	527	272181
468	267024	498	269722	528	272263
469	267117	59	269810	529	272345
470	267209	500	269897	530	272427
471	267302	50	269983	531	272509
472	267394	502	270070	532	272591
473	267486	503	270156	533	272672
474	267577	504	270243	534	272754
475	267669	505	270329	535	272835
476	267760	506	270415	536	272916
477	267851	507	270500	537	272997
478	267942	508	270586	538	273078
479	268033	509	270671	539	273158
480	268124	510	270757	540	272239

Ex hac Tabula lumes latera triangulorum rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
41	273319	571	275663	601	277887
42	273399	572	275739	602	277959
43	273479	573	275815	603	278031
44	273559	574	275891	604	278103
45	273639	575	275966	605	278175
46	273719	576	276042	606	278247
47	273798	577	276117	607	278318
48	273878	578	276192	608	278390
49	273957	579	276267	609	278461
550	274036	580	276342	610	278532
551	274115	581	275417	611	278604
552	274193	582	276492	612	278675
553	274272	583	276566	613	278746
554	274350	584	276641	614	278816
555	274429	585	276715	615	278887
556	274507	586	276789	616	278958
557	274585	587	276863	617	279028
558	274663	588	276937	618	279098
559	274741	589	277011	619	279169
560	274818	590	277085	620	279239
561	274896	591	277158	621	279309
562	274973	592	277232	622	279379
563	275050	593	277305	623	279448
564	275127	594	277378	624	279518
565	275204	595	277451	625	279588
566	275281	596	277524	626	279657
567	275358	597	277597	627	279726
568	275434	598	277670	628	279795
569	275511	599	277742	629	279865
570	275587	600	277815	630	279934

Ex hac Tabula sumes latera triangulorum rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
631	280002	661	282020	691	283947
632	280071	662	282085	692	284010
933	280140	663	282151	693	284073
634	280208	664	282216	694	284135
635	280277	665	282282	695	284198
636	280345	666	282347	696	284260
637	280413	667	282412	697	284323
638	280482	668	282477	698	284385
639	280550	669	282542	699	284447
640	280617	670	282607	700	284509
641	280685	671	282672	701	284571
642	280753	672	282736	702	284633
643	280821	673	282801	703	284695
644	280888	674	282865	704	284757
645	280955	675	282930	705	284818
646	281023	676	282994	706	284880
647	281090	677	283058	707	284941
648	281157	678	283122	708	285003
649	281224	679	283186	709	285064
650	281291	680	283250	710	285125
651	281358	681	283314	711	285186
652	281424	682	283378	712	285247
653	281491	683	283442	713	285308
654	281557	684	283505	714	285369
655	281624	685	283569	715	285430
656	281690	686	283632	716	285491
657	281756	687	283695	717	285551
658	281822	688	283758	718	285612
659	281888	689	283821	719	285672
660	281954	690	283884	720	285733

Ex hac Tabula sumes latera triangulorum rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
721	285793	751	287553	781	289255
722	285853	752	287621	782	289320
723	285913	753	287679	783	289375
724	285973	754	287737	784	289431
725	286033	755	287794	785	289486
726	286093	756	287852	786	289542
727	286153	757	287909	787	289597
728	286213	758	287966	788	289652
729	286272	759	288024	789	289707
730	286332	760	288081	790	289762
731	286391	761	288138	791	289817
732	286451	762	288195	792	289872
733	286510	763	288252	793	289927
734	286569	764	288309	794	289982
735	286628	765	288366	795	290036
736	286687	766	288422	796	290091
737	286746	767	288479	797	290145
738	286805	768	288536	798	290200
739	286864	769	288592	799	290254
740	286923	770	288649	800	290308
741	286981	771	288705	801	290363
742	287040	772	288761	802	290417
743	287098	773	288817	803	290471
744	287157	774	288874	804	290525
745	287215	775	288930	805	290579
746	287273	776	288986	806	290633
747	287332	777	289042	807	290687
748	287390	778	289097	808	290741
749	287448	779	289153	809	290794
750	287506	780	289209	810	290848

Ex hac Tabula sumes latera triangulorum rectilineorum.

Ex hac Tabula lumes latera triangulorum rectilineorum.

N.	Logar.	N.	Logar.	N.	Logar.
811	290902	841	292479	871	294001
812	290955	842	292531	872	294051
813	291009	843	292582	873	294101
814	291062	844	292634	874	294151
815	291115	845	292685	875	294200
816	291169	846	292737	876	294250
817	291222	847	292788	877	294299
818	291275	848	292839	878	294349
819	291328	849	292890	879	294398
820	291381	850	292941	880	294448
821	291434	851	292992	881	294497
822	291487	852	293043	882	294546
823	291539	853	293094	883	294596
824	291592	854	293145	884	294645
825	291645	855	293196	885	294694
826	291698	856	293247	886	294743
827	291750	857	293298	887	294792
828	291803	858	293348	888	294841
829	291855	859	293399	889	294890
830	291907	860	293449	890	294939
831	291960	861	293500	891	294987
832	292012	862	293550	892	295036
833	292064	863	293601	893	295085
834	292116	864	293651	894	295133
835	292168	865	293701	895	295182
836	292220	866	293751	896	295230
837	292272	867	293801	897	295279
838	292324	868	293851	898	295327
839	292376	869	293901	899	295375
840	292427	870	293951	900	295424

N.	Logar.	N.	Logar.	N.	Logar.
901	295472	931	296894	961	298272
902	295520	932	296941	962	298317
903	295568	933	296988	963	298362
904	295616	934	297034	964	298407
905	295664	935	297081	965	298452
906	295712	936	297127	966	298497
907	295760	937	297173	967	298542
908	295808	938	297220	968	298587
909	295856	939	297266	969	298632
910	295904	940	297312	970	298677
911	295951	941	297358	971	298721
912	295999	942	297405	972	298766
913	296047	943	297451	973	298811
914	296094	944	297497	974	298855
915	296142	945	297543	975	298900
916	296189	946	297589	976	298944
917	296236	947	297634	977	298989
918	296284	948	297680	978	299033
919	296331	949	297726	979	299078
920	296378	950	297772	980	299122
921	296425	951	297818	981	299166
922	296473	952	297863	982	299211
923	296520	953	297909	983	299255
924	296567	954	297954	984	299299
925	296014	955	298000	985	299343
920	296661	956	298045	986	299387
927	296707	957	298091	987	299431
928	296754	958	298136	988	299475
929	296801	959	298181	985	299519
930	296848	960	298227	990	299563

Ex hac Tabula sumes latera triangulorum rectilineorum

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N.	Logar.	N.	Logar.	N.	Logar.
991	299507	995	299782	999	299956
992	299651	996	299825	1000	300000
993	299794	997	299869		
994	299738	998	299913		

OBSERVATIONES.

Prima. *Logarithmi*, numeri sunt artificiosi in-fuis quibus respondent absolutis numeris addicti vt illorum subeant vicem, equidem commodè & scitè cum sola *Additione* & *Substractione Logarithmorum* inter se confiant difficiliores & morosiores Arithmetices praxes. vtputa *Multiplicatio*, *Partitio*, *Aurea regula*, *Quadratæ radicis inuentio*, &c.

Secunda. Cùm Canon superior *Logarithmorum* trans 1000 non excurrat, si summa conficienda per multiplicationem ortam ex additione duorum *Logarithmorum*, aut partienda per substractionem *Logarithmi* à *Logarithmi* excedat 1000 haud valet canonis superioris vsus. Si partes quibus supposititi quæ tur *Logarithmi* sint plures 1000 tunc contractio est opus, & pro duobus scilicet semipalmorum millibus, milite palmi vsurpandi & quærendi.

Tertia. Ea est *Logarithmorum* vis & natura vt si *Logarithmus* dati numeri absoluti addatur *Logarithmo* alterius numeri etiam dati *Summa* cõflata ex illis duobus *Logarithmis*, quæsita inter *Logarithmos*, det è regione læuorsum numeri

absolutū qui consurgeret si ex duobus datis numeris absolutis alter per alterum multiplicaretur. At si Logarithmus ab alio Logarithmo subducatur residuum ex substractione exhibebit in Canone ex aduerso sinistrorsum *Quotum* qui extitisset ex partitione facta maioris numeri per minorem. *Moneo* tamen ita diuisionem istam per *Logarithmos* factam se habere, vt fractiones non exhibeat. *Praterea* (quod res seipsa satis loquitur) Additionem & Subtractionem absolutorum numerorum non posse fieri per *Logarithmos.*

PRAXIS.

Multiplicationis per Logarithmos.

Numer. multiplicandus. 52. *Logarith.* 171600.
Numer. multiplicans. 4. *Logarith.* 060205.
Iunge Logar. *summa.* 231805. *exhibet* 208.

PRAXIS.

Partitionis per Logarithmos.

Numer. diuidendus. 528. *Logarith.* 272263.
Diuisor. 2. *Logarith.* 030102.
Subtr. Logar. Diuis. Residuum 242161.
exhibet Quotum. 264.

PRAXIS.

Regulæ aureæ seu trium proportionalium numerorum ad producendum quartum numerum per Logarith.

Hæc regula fit per Addition. Logar. Secundi, Tertij numeri, & Subtractionem Logar. primi numeri a Summa aliorum duorum.

Numer. Secundus. 20. *Logarith.* 130103.
Numer. Tertius. 48. *Logarith.* 168124.
90. *Summa.* 298227.
Numer. primus. 15. *Logarith.* 117609.
Quartus quæsitus 64 *Residuum.* 180618.

Huius regulæ frequens est vsus in Astronomia in qua quilibet frustra se iactabit nisi peritus Logistica & Calculo sit. Verum cùm in Triangulorum tum Rectilineorum tum Sphæricorum analysi in vsu sit Regula aurea frequentissime, reliqua sit tyronibus operosa admodum *Partitio* & *Multiplicatio*, gratissimum laboris & operæ compendium fit per Logarithmorum inuentum: totum enim *Aureæ regulæ* negotium sola *Additione* & *Subtractione* per *Logarithmos* conficitur.

Cautio. Certè in Triangulis Sphæricis angulorum & arcuum *Logarithmi* ex Canone *Sinuum* & *Tangentium* assumuntur. At in Rectilineis triangulis angulorum quidem Logarithmos Canon *Sinuum* & *Tangentium* subministrat, verùm Logarithmi laterum in alterò Logarithmorum Canone proximè scilicet superiore quærendi sunt.

PRAXIS.

Inuentionis Quadratæ radicis per Logarith.

Bipartire Logarithmum dati numeri cuius radix quadrata quæritur. Alterutra pars inter Logarithmos quæsita dabit proximè ad finitram inter illi solutos numeros radicem quæsitam.

Numerus. 956. *Logarith.* 298045.
Radix. 31. *Dimidium.* 149022.

TABVLÆ LVNÆ SOLARES.

Ad meridianum Parisinum compositæ.

Expositio aliquorum terminorum.

Ad faciliorem Tabularum intelligentiam.

ÆQVALIS MOTVS SOLIS

Idem est ac motus Longitudinis Solis, numeratur ab Ariete siue Æquinoctio verno.

APOGAEVM.

Est punctum excentrici Solis a Terra remotissimum: hoc punctum cum initio mundi esset in Ariete, æquabili progressione ad nostra vsque tempora in consequentia paulatim adeo raptum est vt hodie ad septimum admodum gradum Cancri peruenerit.

MOTVS APOGAEI.

Est motus puncti Apogæi numeratus ab Ariete.

ANOMALIA SOLIS.

Est ipsemet motus Solis numeratus a puncto Apogæi non ab Ariete; inuenitur talis motus per subtractionem motus Apogæi ab æquali motu Solis: residuum enim vocatur Anomalia Solis.

ANOMALIA LVNAE.

Est motus Lunæ in suo Epicyclo.

MOTVS LATITVDINIS LVNAE.

Est Lunæ motꝰ aut potius motus Epicycli Lunæ numeratus a nodis seu intersectione semitæ Lunæ cum Ecliptica: neque enim hæc semita, quę circulus menstruus Lunæ est, Eclypticæ directè subiacet, nisi in duobus punctis qui *nodi* vocãtur.

MOTVS LVNAE A SOLE.

Est ipse motus latitudinis, sed numeratus a Sole vnde suam appellationem accipit.

PROSTHAPHAERESES.

Sunt differentiæ medij motus a vero, seu æqualis motus, ab inæquali.

Æqualis motus Solis. Apogæi Solis.

	S.	G.	M.	S	S.	G.	M.	S.
100	0	0	45	20	0	1	52	34
200	0	1	30	43	0	3	45	10
300	0	2	16	6	0	5	37	45
400	0	3	1	30	0	7	30	22
500	0	3	46	52	0	9	22	57
600	0	4	32	14	0	11	15	33
700	0	5	17	36	0	13	8	8
800	0	6	3	0	0	15	0	44
900	0	6	48	22	0	16	53	19
1000	0	7	33	45	0	18	45	55
2000	0	15	7	32	1	7	31	52
3000	0	22	41	18	1	26	17	49
4000	1	0	15	6	2	15	3	46
5000	1	7	48	52	3	3	49	43
6000	1	15	22	39	3	22	35	40
7000	1	22	56	25	4	11	21	36
1	11	29	45	39	0	0	1	6
2	11	29	31	19	0	0	2	14
3	11	29	16	59	0	0	3	21
4	0	0	1	47	0	0	4	29
5	11	29	47	28	0	0	5	36
6	11	29	33	8	0	0	6	44
7	11	29	18	48	0	0	7	52
8	0	0	3	36	0	0	8	59
9	11	29	49	17	0	0	10	7
10	11	29	34	57	0	0	11	14
11	11	29	20	36	0	0	12	21

Tabula I. Annorum.

Tabula I. Annorum.

Anomaliæ Lunæ					Latitudinis Lunæ.			
	S.	G.	M.	S.	S.	G.	M.	S.
100	6	18	39	29	2	21	59	37
200	1	7	19	2	5	13	59	15
300	7	25	58	33	8	5	58	54
400	2	14	38	5	10	27	58	32
500	9	3	17	35	1	19	58	11
600	3	21	57	7	4	11	57	49
700	10	10	36	39	7	3	57	27
800	4	29	16	10	9	25	57	7
900	11	17	55	41	0	17	56	45
1000	6	6	35	12	3	9	56	22
2000	0	13	10	27	6	19	52	49
3000	5	9	45	40	9	29	49	13
4000	0	26	20	54	1	9	45	37
5000	7	2	56	7	4	19	42	1
6000	9	1	58	53	1	5	43	4
7000	7	16	6	34	11	9	34	52
1	2	28	43	12	4	28	42	45
2	5	27	26	25	9	27	25	30
3	8	26	9	39	2	26	8	15
4	0	7	56	46	8	8	4	46
5	3	6	39	59	1	6	47	32
6	6	5	23	12	6	5	30	17
7	9	4	6	26	11	4	13	2
8	0	15	53	33	4	16	9	33
9	3	14	36	46	9	14	52	18
10	6	13	19	59	2	13	35	4
11	9	12	3	12	7	12	17	49

	Æquationis motº Solis.				Apogæi Solis.			
	S.	G.	M.	S.	S.	G.	M.	S.
12	0	0	5	24	0	00	13	29
13	11	29	51	5	0	00	14	36
14	11	29	36	45	0	00	15	44
15	11	29	22	25	0	00	16	52
16	0	0	7	13	0	00	17	59
17	11	29	52	54	0	00	19	7
18	11	29	38	34	0	00	20	14
19	11	29	24	14	0	00	21	22
20	0	0	9	2	0	00	22	30
21	11	29	54	43	0	00	23	37
22	11	29	40	23	0	00	24	45
23	11	29	26	3	0	00	25	52
24	0	0	10	51	0	00	27	00
25	11	29	56	31	0	00	28	8
26	11	29	42	12	0	00	29	14
27	11	29	27	51	0	00	30	22
28	0	0	12	40	0	00	31	29
29	11	29	58	20	0	00	32	37
30	11	29	44	1	0	00	33	45
31	11	29	29	40	0	00	34	52
32	0	0	14	19	0	00	36	00
33	0	0	0	9	0	00	37	7
34	11	29	45	50	0	00	38	15
35	11	29	31	29	0	00	39	23
36	0	0	16	18	0	00	40	20
37	0	0	1	58	0	00	41	38
38	11	29	47	39	0	00	42	45
39	11	29	33	18	0	00	43	53
40	0	0	18	7	0	00	45	1
41	0	0	3	47	0	00	46	8

	Anomal. Lunæ. S.	G.	M.	S.	Latitudinis Lunæ. S.	G.	M.	S.
12	0	23	50	19	0	24	14	19
13	3	22	33	32	5	22	57	5
14	6	21	16	46	10	21	39	50
15	9	19	59	59	3	20	22	35
16	1	1	47	5	9	2	19	6
17	4	0	30	19	2	1	1	53
18	6	29	13	32	6	29	44	38
19	9	27	56	46	11	28	27	23
20	1	9	43	53	5	10	23	54
21	4	8	27	6	10	9	6	39
22	7	7	10	20	3	7	49	25
23	10	5	53	33	8	6	32	11
24	1	17	40	40	1	18	28	41
25	4	16	23	53	6	17	11	27
26	7	15	7	7	11	15	54	12
27	10	13	50	20	4	14	36	57
28	1	25	37	27	9	26	33	28
29	4	24	20	40	2	25	16	14
30	7	23	3	58	7	23	59	0
31	10	21	47	6	0	22	41	45
32	2	3	34	13	6	4	38	16
33	5	2	17	26	11	3	21	1
34	8	1	0	40	4	2	3	47
35	10	29	43	53	9	0	46	31
36	2	11	31	0	2	12	43	3
37	5	10	14	13	7	11	25	49
38	8	8	57	27	0	10	8	34
39	11	7	40	39	5	8	51	19
40	2	19	27	47	10	20	47	50
41	5	18	11	1	3	19	30	36

	Æqualis motº Solis.				Apogæi Solis.			
	S.	G.	M.	S.	S.	G.	M.	S.
42	11	29	49	28	0	00	47	16
43	11	29	35	7	0	00	48	24
44	0	0	20	56	0	00	49	31
45	0	0	6	36	0	00	50	39
46	11	29	51	16	0	00	51	46
47	11	29	36	56	0	00	52	54
48	0	0	21	44	0	00	54	2
49	0	0	7	25	0	00	55	9
50	11	29	53	5	0	00	56	17
51	11	29	38	45	0	00	57	23
52	0	0	23	33	0	00	58	32
53	0	0	9	14	0	00	59	40
54	11	29	54	54	0	1	0	46
55	11	29	40	34	0	1	1	54
56	0	0	25	22	0	1	3	1
57	0	0	11	3	0	1	4	9
58	11	29	56	43	0	1	5	17
59	11	29	42	23	0	1	6	24
60	0	0	27	11	0	1	7	32
61	0	0	12	52	0	1	8	40
62	11	29	58	32	0	1	9	47
63	11	29	44	12	0	1	10	55
64	0	0	29	0	0	1	12	2
65	0	0	14	41	0	1	13	10
66	0	0	0	21	0	1	14	18
67	11	29	46	1	0	1	15	25
68	0	0	30	49	0	1	16	33
69	0	0	16	30	0	1	17	41
70	0	0	2	10	0	1	18	48
71	11	29	47	49	0	1	19	56

Anomaliæ Lunæ.					Latitudinis Lunæ.			
	S.	G.	M.	S.	S.	G.	M.	S.
42	8	16	54	14	8	18	[illegible]	21
43	11	15	37	27	[illegible]	[illegible]	[illegible]	6
44	2	27	24	34	6	[illegible]	[illegible]	37
45	5	26	7	48	11	27	35	22
46	8	24	51	0	4	26	18	8
47	11	23	34	14	9	25	0	53
48	3	5	21	21	3	6	57	24
49	6	4	4	35	8	5	40	10
50	9	2	47	46	1	4	22	55
51	0	1	31	0	6	3	5	40
52	3	13	18	7	11	15	2	11
53	6	12	1	21	4	13	44	57
54	9	10	44	34	9	12	27	42
55	0	9	27	47	2	11	10	27
56	3	21	14	54	7	23	6	58
57	6	19	58	8	0	21	49	43
58	9	18	41	20	5	20	32	29
59	0	17	24	34	10	19	15	14
60	3	29	11	42	4	1	11	45
61	6	27	54	55	8	29	54	31
62	9	26	38	8	1	28	37	16
63	0	25	21	21	6	27	20	1
64	4	7	8	29	0	9	16	32
65	7	5	51	42	5	7	59	18
66	10	4	34	54	10	6	42	4
67	1	3	18	8	3	5	24	49
68	4	15	5	15	8	17	21	20
69	7	13	48	28	1	16	4	6
70	10	12	31	41	6	14	46	51
71	1	11	14	54	11	13	29	36

Æqualis motꝰ Solis.				Apogæi Solis.			
S.	G.	M.	S.	S.	G.	M.	S.
72	0	0	32	38	00	1	21	3
73	0	0	18	18	00	1	22	11
74	0	0	3	59	00	1	23	18
75	11	29	49	38	00	1	24	26
76	0	0	34	27	00	1	25	34
77	0	0	20	7	00	1	26	41
78	0	0	5	48	00	1	27	49
79	11	29	51	28	00	1	28	55
80	0	0	36	17	00	1	30	3
81	0	0	21	56	00	1	31	10
82	0	0	7	37	00	1	32	17
83	11	29	53	16	00	1	33	25
84	0	0	38	5	00	1	34	33
85	0	0	23	45	00	1	35	40
86	0	0	9	26	00	1	36	48
87	11	29	55	5	00	1	37	53
88	0	0	39	54	00	1	39	3
89	0	0	25	34	00	1	40	11
90	0	0	11	15	00	1	41	18
91	11	29	56	54	00	1	42	26
92	0	0	41	42	00	1	43	33
93	0	0	27	23	00	1	44	41
94	0	0	13	3	00	1	45	49
95	11	29	58	43	00	1	46	56
96	0	0	43	31	00	1	48	4
97	0	0	29	12	00	1	49	11
98	0	0	14	52	00	1	50	19
99	0	0	0	32	00	1	51	27
100	0	0	45	20	00	1	52	34

Anomaliæ Lunæ.					Latitudinis Lunæ.			
	S.	G.	M.	S.	S.	G.	M.	S.
72	4	23	2	2	4	25	26	7
73	7	21	45	14	9	24	8	53
74	10	20	28	28	2	22	51	38
75	1	19	11	41	7	21	34	23
76	5	0	58	49	1	3	30	54
77	7	29	42	1	6	2	13	39
78	10	28	25	15	11	0	56	25
79	1	27	8	29	3	29	39	11
80	5	8	55	36	9	11	35	42
81	8	7	38	49	2	10	13	27
82	11	6	22	2	7	9	1	12
83	2	5	5	16	0	7	43	57
84	5	16	52	23	5	19	40	28
85	8	15	35	35	10	18	23	14
86	11	14	18	49	3	17	6	0
87	2	13	2	2	8	15	48	45
88	5	24	49	10	1	27	45	16
89	8	23	32	22	6	26	28	0
90	11	22	15	35	11	25	10	46
91	2	20	58	49	4	23	53	31
92	6	2	45	55	10	5	50	2
93	9	1	29	9	3	4	32	48
94	0	0	12	22	8	3	15	33
95	2	28	55	36	1	1	58	18
96	6	10	42	42	6	13	54	49
97	9	9	25	56	11	12	37	35
98	0	8	9	9	4	11	20	20
99	3	6	52	23	9	10	3	6
100	6	18	39	29	2	28	59	37

Tabula I. Annorum

Tabula II. Mensium.

Equatis motus Solis. Menses.					Apogæi Solis. Communes.			
	S.	G.	M.	S.	S.	G.	M.	S.
Ian.	00	00	00	00	00	00	00	00
Feb.	1	0	33	18	0	0	0	5
Mar.	1	28	9	11	0	0	0	10
Apr.	2	28	42	29	0	0	0	15
Mai.	3	28	16	38	0	0	0	20
Iun.	4	28	49	5	0	0	0	25
Iul.	5	28	24	5	0	0	0	30
Aug.	6	28	57	23	0	0	0	35
Sept.	7	29	30	41	0	0	0	40
Oct.	8	29	4	50	0	0	0	45
Nou.	9	29	38	8	0	0	0	50
Dec.	10	29	12	17	0	0	0	55
Ann.	11	29	45	39	0	0	1	6

	Menses.				Bissextiles.			
	S.	G.	M.	S.	S.	G.	M.	S.
Ian.	00	00	00	00	00	00	00	00
Feb.	1	00	33	18	0	0	0	5
Mar.	1	29	8	19	0	0	0	10
Apr.	2	29	41	37	0	0	0	15
Mai.	3	29	15	46	0	0	0	20
Iun.	4	29	49	4	0	0	0	25
Iul.	5	29	22	13	0	0	0	30
Aug.	6	29	56	31	0	0	0	35
Sept.	8	00	29	49	0	0	0	40
Oct.	9	00	3	58	0	0	0	45
Nou.	10	00	37	16	0	0	0	50
Dec.	11	00	11	25	0	0	0	55
Ann.	00	00	44	47	0	0	1	6

Anomaliæ Lunæ. Latitudinis Lunæ.

Menses. Communes.

	S.	G.	M.	S.	S.	G.	M.	S.
Ian.	00	00	00	00	00	00	00	00
Feb.	1	15	0	52	1	20	6	35
Mar.	1	20	50	2	2	0	31	53
Apr.	3	5	50	54	3	20	38	28
Mai.	4	7	47	52	4	27	31	17
Iun.	5	22	48	44	6	17	37	52
Iul.	6	24	45	42	7	24	30	41
Aug.	8	9	46	34	9	14	37	16
Sept	9	24	47	26	11	4	43	51
Oct.	10	26	44	24	0	11	36	40
No.	0	11	45	16	2	1	43	15
Dec.	1	13	42	14	3	8	36	4
Ann.	2	28	43	12	4	28	42	45

Menses. Bissextiles.

	S.	G.	M.	S.	S.	G.	M.	S.
Ian.	00	00	00	00	00	00	00	00
Feb.	1	15	00	52	1	20	6	35
Mar.	2	3	53	56	2	13	45	39
Apr.	3	18	53	48	4	3	52	14
Mai.	4	20	50	36	5	10	45	3
Iun.	6	5	51	28	7	00	51	38
Iul.	7	7	48	26	8	7	44	27
Aug.	8	22	49	18	9	27	41	2
Sept	10	7	50	10	11	17	47	37
Oct.	11	9	47	8	0	24	40	26
No.	0	24	48	40	2	14	47	1
Dec.	1	26	44	58	3	21	39	40
Ann.	3	11	47	6	5	11	56	30

Tabula II. Dierum

In Diebus vacat Apogæum. Quare pro Dierum anomalia tuto sumpari potest motus Æqualis Solis in Diebus. Pro Diebus 31. completis sume Menses absolutum.

Æqualis mot. Solis.

Dies	S.	G.	M.	S.
1	0	0	59	8
2	0	1	58	16
3	0	2	57	24
4	0	3	56	33
5	0	4	55	41
6	0	5	54	49
7	0	6	53	58
8	0	7	53	6
9	0	8	52	14
10	0	9	51	23
11	0	10	50	31
12	0	11	49	39
13	0	12	48	48
14	0	13	47	56
15	0	14	47	4
16	0	15	46	13
17	0	16	45	21
18	0	17	44	29
19	0	18	43	38
20	0	19	42	46
21	0	20	41	54
22	0	21	41	3
23	0	22	40	11
24	0	23	39	19
25	0	24	38	28
26	0	25	37	36
27	0	26	36	44
28	0	27	35	53
29	0	28	35	1
30	0	29	34	9

Anomaliæ Lunæ.					Latitudinis Lunæ.			
Dies	S.	G.	M.	S.	S.	G.	M.	S.
1	0	13	3	53	0	13	13	45
2	0	26	7	47	0	26	27	31
3	1	9	11	41	1	9	41	16
4	1	22	15	35	1	22	55	2
5	2	5	19	29	2	6	8	48
6	2	18	23	23	2	19	22	33
7	3	1	27	17	3	2	36	19
8	3	14	31	11	3	15	50	5
9	3	27	35	5	3	29	3	50
10	4	10	38	59	4	12	17	36
11	4	23	42	53	4	25	31	22
12	5	6	46	47	5	8	45	7
13	5	19	50	41	5	21	58	53
14	6	2	54	35	6	5	12	39
15	6	15	58	29	6	18	26	24
16	6	29	2	23	7	1	40	10
17	7	12	6	17	7	14	53	50
18	7	25	10	11	7	28	7	41
19	8	8	14	5	8	11	21	27
20	8	21	17	59	8	24	35	13
21	9	4	21	53	9	7	48	58
22	9	17	25	46	9	21	2	44
23	10	0	29	40	10	4	16	30
24	10	13	33	34	10	17	30	15
25	10	26	37	28	11	0	44	1
26	11	9	41	22	11	13	57	47
27	11	22	45	16	11	27	11	32
28	12	5	49	10	12	10	25	18
29	12	18	53	4	12	23	39	4
30	1	1	56	58	1	6	52	49

Sig. O. Subtr.	G.	M.		Sig. O. Subtr.	G.	M.		Elongat.
0	0	0		0	0			102900
1	0	2		0	5			102899
2	0	4		0	10			102898
3	0	6		0	15			102896
4	0	8		0	20			102894
5	0	10	*Tabula. 6*	0	25	*Tabula. 6*		102891
6	0	12		0	30			102888
7	0	14		0	35			102884
8	0	16		0	40			102879
9	0	18		0	45			102873
10	0	20		0	50			102867
11	0	22		0	55			102860
12	0	24		1	0			102853
13	0	26		1	5			102845
14	0	28		1	10			102836
15	0	30		1	15			102826
16	0	32		1	20			102816
17	0	34	*Prosthaphæreseon.*	1	25	*Prosthaphæreseon.*		102805
18	0	36		1	29			102793
19	0	38		1	34			102781
20	0	40		1	39			102768
21	0	42		1	44			102755
22	0	44		1	49			102741
23	0	46		1	53			102726
24	0	48		1	58			102711
25	0	50		2	3			102695
26	0	52		2	7			102678
27	0	54		2	12			102660
28	0	55		2	16			102642
29	0	57	*Solis.*	2	21	*Lunæ.*		102623
30	0	59		2	25			102604
Sig. 11. Addz.				*Sig. 11. Adde*				*Elongatio.*

Elongatio Lunæ a Centro Excentric.

Sig.1.Subtr.			Sig.1.Subtr.			Elongati
G.	M		G.	M.		
0	59		2	25		102604
1	1		2	30		102584
1	3		2	34		102563
1	4		2	38		102542
1	6		2	43		102520
1	8	Tabula. 6	2	47	Tabula 6	102497
1	10		2	51		102474
1	11		2	55		102450
1	13		2	59		102426
1	15		3	3		102401
1	16		3	7		102375
1	18		3	11		102348
1	19		3	15		102321
1	21		3	19		102293
1	23		3	23		102265
1	24		3	26		102236
1	26	Prosthaphæreseon.	3	30	Prosthaphæreseon.	102206
1	27		3	34		102176
1	29		3	37		102145
1	30		3	41		102114
1	31		3	44		102082
1	33		3	47		102049
1	34		3	51		102016
1	35		3	54		101982
1	37		3	57		101948
1	38		4	0		101913
1	39		4	3		101877
1	40		4	6		101841
1	42	Solis.	4	9	Lunæ.	101804
1	43		4	12		101767
1	44		4	14		101729
Sig.10. Adde.			Sig.10. Adde			Elongati

Hæc Tabula cum Anomalia Sol. ac Lun. adeunda est.

Sig. 2. Subtr. G.	M.	Tabula. 6	Sig. 2. Subtr. G.	M.	Tabula. 6	Elongatio.	Elongatio Lunæ a Centro Excentrici.
0	1 44		4	14		101729	
1	1 45		4	17		101691	
2	1 46		4	20		101652	
3	1 47		4	22		101613	
4	1 48		4	24		101573	
5	1 49		4	27		101532	
6	1 50		4	29		101491	
7	1 51		4	31		101440	
8	1 52		4	33		101407	
9	1 53		4	35		101365	
10	1 53		4	37		101322	
11	1 54		4	39		101279	
12	1 55	Prosthaphæreseon.	4	41	Prosthaphæreseon.	101235	
13	1 56		4	42		101191	
14	1 56		4	44		101146	
15	1 57		4	46		101101	
16	1 58		4	47		101055	
17	1 58		4	48		101009	
18	1 59		4	50		100963	
19	1 59		4	51		100916	
20	2 0		4	52		100869	
21	2 0		4	53		100821	
22	2 0		4	54		100773	
23	2 1		4	55		100725	
24	2 1	Solis.	4	55	Lunæ.	100676	
25	2 1		4	56		100627	
26	2 2		4	57		100578	
27	2 2		4	57		100528	
28	2 2		4	57		100478	
29	2 2		4	58		100428	
30	2 2		4	58		100378	

Sig. 9. Adde. Sig. 9. Adde Elongatio.

Sig.3.Subtr.			Sig.3.Subtr.			Elongatio.	
G.	M.		G.	M.			
2	2		4	58		100378	30
2	2		4	58		100327	29
2	2		4	58		100276	28
2	2		4	58		100225	27
2	2		4	58		100174	26
2	2		4	57		100123	25
2	2		4	57		100072	24
2	2	Tabula. V I.	4	57	Tabula. V I.	100021	23
2	2		4	56		99969	22
2	1		4	56		99917	21
2	1		4	55		99865	20
2	1		4	54		99813	19
2	0		4	53		99761	18
2	0		4	52		99709	17
2	0		4	51		99657	16
1	59		4	50		99605	15
1	59		4	49		99553	14
1	58	Prosthaphæreseon.	4	47	Prosthaphæreseon.	99501	13
1	58		4	46		99440	12
1	57		4	44		99397	11
1	56		4	43		99343	10
1	56		4	41		99293	9
1	55		4	39		99242	8
1	54		4	37		99191	7
1	53		4	35		99140	6
1	52		4	33		99089	5
1	52		4	31		99038	4
1	51		4	29		98987	3
1	50		4	27		98937	2
1	49		4	24		98887	1
1	48		4	22		98838	0
Sig.8.Adde.			Sig.8.Adde			Elongatio.	

Sig.4.Subtr.				Sig.4.Subtr.			Elongatio.
	G.	M.		G.	M.		
0	1	48		4	22		98838
1	1	47		4	19		98789
2	1	46		4	17		98740
3	1	44		4	14		98691
4	1	43		4	11		98643
5	1	42		4	8		98595
6	1	41	Tabula. V I.	4	5	Tabula. I.	98547
7	1	40		4	2		98500
8	1	38		3	59		98453
9	1	37		3	56		98407
10	1	36		3	53		98361
11	1	34		3	49		98316
12	1	33		3	46		98272
13	1	32		3	42		98228
14	1	30		3	39		98185
15	1	29		3	35		98142
16	1	27		3	31		98100
17	1	25	Prosthaphæreseon.	3	28	Prosthaphæreseon.	98059
18	1	24		3	24		98018
19	1	22		3	20		97978
20	1	21		3	16		97938
21	1	19		3	12		97899
22	1	17		3	8		97861
23	1	16		3	4		97824
24	1	14		2	59		97787
25	1	12		2	55		97751
26	1	10		2	51		97716
27	1	8	Solis.	2	46	Lunæ.	97682
28	1	7		2	42		97649
29	1	5		2	37		97616
30	1	3		2	33		97584
Sig.7.Adde.				Sig.7.Adde			Elongatio.

Elongatio Lunæ a centro Excentrici.

Sign. 5. Subtr.		Sig. 5. Subtr.		Elongatio.	
M.	G.	G.	M.		
1	3	2	23	97584	30
1	1	2	28	97553	29
0	59	2	24	97523	28
0	57	2	19	97494	27
0	55	2	14	93466	26
0	53	2	9	97439	25
0	51	2	4	97413	24
0	49	2	0	97388	23
0	47	1	55	97364	22
0	45	1	50	97341	21
0	43	1	45	97320	20
0	41	1	40	97299	19
0	39	1	35	97279	18
0	37	1	29	97260	17
0	35	1	24	97242	16
0	32	1	19	97225	15
0	30	1	14	97209	14
0	28	1	9	97194	13
0	26	1	3	97180	12
0	24	0	58	97167	11
0	22	0	53	97155	10
0	19	0	48	97144	9
0	17	0	42	97134	8
0	15	0	37	97126	7
0	13	0	32	97120	6
0	11	0	26	97115	5
0	8	0	21	97111	4
0	6	0	16	97108	3
0	4	0	10	97105	2
0	2	0	5	97102	1
0	0	0	0	97100	0

Hæc Tabula cum Anomalia Sol. ac Lun. adeunda est.

Tabula. 6

Prosthaphæreseon.

Solis.

Tabula. 6

Prosthaphæreseon.

Lunæ.

Sig. 6. Adde.		Sig. 6. Adde		Elongatio.

Tabula 7. Longitudinis Lunæ a Sol. & Centr. Sol.

Æqu. motº centri Solis.				Longitud. Lunæ.			
	S.	G.	M.	S.	S.	G.	M.	S.
100		12	0	29	10	7	3	7
200		23	0	58	8	14	6	14
300	1	6	1	27	6	21	9	22
400	1	18	1	57	4	28	12	31
500	2	0	2	27	3	5	15	38
600	2	12	2	56	1	12	18	45
700	2	24	3	26	11	19	21	53
800	3	6	3	56	9	26	25	1
900	3	18	4	25	8	3	28	9
1000	4	0	4	54	6	10	31	16
2000	7	29	9	50	0	21	2	35
3000	0	0	14	46	7	1	33	52
4000	4	0	19	41	1	12	5	10
5000	8	0	24	38	7	22	36	27
6000	0	0	29	34	2	3	7	46
7000	4	0	34	30	8	13	39	3
1			7	11	4	9	37	21
2			14	23	8	19	14	43
3	00	00	21	35	0	28	52	6
4	00	00	28	48	5	20	40	55
5	00	00	36	0	10	00	18	16
6	00	00	43	12	2	9	55	39
7	00	00	50	24	6	19	33	1
8	00	00	57	37	11	11	21	51
9	00	1	4	49	3	20	59	12
10	00	1	12	1	8	00	36	34
11	00	1	19	13	0	10	13	56
12	00	1	26	26	5	2	2	45
13	00	1	33	38	9	11	40	7
14	00	1	40	50	1	21	17	29

Tabula Annorum.

Aequ. motº centri Sol.				Longitud. Lunæ.			
S.	G.	M.	S.	S.	G.	M.	S.
15	0	1	48	2	6	00	54	52
16	0	1	55	15	10	22	43	40
17	0	2	2	27	3	2	21	3
18	0	2	9	39	7	11	58	25
19	0	2	16	51	11	21	35	47
20	0	2	24	5	4	13	24	37
21	0	2	31	17	8	23	1	59
22	0	2	38	29	1	2	39	21
23	0	2	45	41	5	12	16	44
24	0	2	52	54	10	4	5	32
25	0	3	0	6	2	13	42	54
26	0	3	7	17	6	23	20	17
27	0	3	14	29	11	2	57	39
28	0	3	21	42	3	24	46	27
29	0	3	28	54	8	4	23	50
30	0	3	35	7	0	14	1	11
31	0	3	42	19	4	23	38	34
32	0	3	49	32	9	15	27	23
33	0	3	56	44	1	25	4	45
34	0	4	3	56	6	4	42	7
35	0	4	11	8	10	14	19	30
36	0	4	18	21	3	6	8	18
37	0	4	25	33	7	15	45	40
38	0	4	32	45	11	25	23	3
39	0	4	39	57	4	5	0	25
40	0	4	48	10	8	26	49	14
41	0	4	55	23	1	6	26	37
42	0	5	2	35	5	16	3	58
43	0	5	9	47	9	25	41	21
44	0	5	17	0	2	17	30	10

Tabula 7. Long. Lunæ a Sole & Centri Sol.

Æqu. mot' centri. Sol.					Longit. Lun.			
	S.	G.	M.	S.	S.	G.	M.	S.
45	0	5	24	12	6	27	7	32
46	0	5	31	24	11	6	44	54
47	0	5	38	36	3	16	22	17
48	0	5	45	49	8	8	11	5
49	0	5	53	1	0	17	48	27
50	0	6	0	14	4	27	25	49
51	0	6	7	25	9	7	3	11
52	0	6	14	39	1	28	52	0
53	0	6	21	50	6	8	29	23
54	0	6	29	2	10	18	6	44
55	0	6	36	14	2	27	44	7
56	0	6	43	27	7	19	32	56
57	0	6	50	39	11	29	10	18
58	0	6	57	51	4	8	47	40
59	0	7	5	3	8	18	25	3
60	0	7	12	16	1	10	13	52
61	0	7	19	28	5	19	51	14
62	0	7	26	40	9	29	28	36
63	0	7	33	52	2	9	5	58
64	0	7	41	5	7	0	54	47
65	0	7	48	17	11	10	32	10
66	0	7	55	29	3	20	9	31
67	0	8	2	41	7	29	46	54
68	0	8	9	54	0	21	35	43
69	0	8	17	7	5	1	13	5
70	0	8	24	19	9	10	50	20
71	0	8	31	31	1	20	27	49
72	0	8	38	44	6	12	16	38
73	0	8	45	56	10	21	54	00
74	0	8	53	8	3	1	31	22

Annorum.

	S.	G.	M.	S.	S.	G.	M.	S.
75	0	9	0	20	7	11	8	44
76	0	9	7	21	0	2	52	33
77	0	9	14	45	4	12	34	56
78	0	9	21	56	8	22	12	17
79	0	9	29	9	1	1	49	41
80	0	9	36	23	5	23	37	30
81	0	9	43	34	10	3	15	51
82	0	9	50	46	2	12	53	13
83	0	9	57	58	6	22	30	36
84	0	10	5	11	11	14	19	25
85	0	10	12	23	3	23	56	46
86	0	10	19	35	8	3	34	9
87	0	10	26	47	0	13	11	31
88	0	10	34	0	5	5	00	21
89	0	10	41	13	9	14	37	42
90	0	10	48	25	1	24	15	4
91	0	10	55	37	6	3	52	26
92	0	11	2	50	10	25	41	16
93	0	11	10	4	3	5	18	37
94	0	11	19	14	7	14	55	59
95	0	11	24	26	11	24	33	22
96	0	11	31	39	4	16	22	11
97	0	11	38	51	8	25	59	33
98	0	11	46	3	1	5	36	55
99	0	11	53	16	5	15	14	17
100	0	12	0	29	10	7	3	7

Tabula 8. Longit. Lunæ & Centr. Sol. in menſib.

Equ.mot⁹ Centri Sol. Menſes.				Longit.Lun.a Sol. Communes.			
	S.	G.	M.	S.	S.	G.	M.	S.
an.	00	00	0	0	0	0	0	0
eb.	00	00	0	36	0	17	54	47
Mar.	00	00	1	9	11	29	15	14
pr.	00	00	1	45	0	17	10	1
Mai.	00	00	2	20	0	22	53	21
un.	00	00	2	56	1	10	48	8
ul.	00	00	3	31	1	16	31	28
ug.	00	00	4	7	2	4	26	15
ept	00	00	4	43	2	22	21	2
Oct.	00	00	5	18	2	28	4	22
Nou	00	00	5	54	3	15	59	9
Dec.	00	00	6	29	3	21	42	29
an.	00	00	7	11	4	9	37	21
nt.								

	Menſes.				Biſſextiles.			
	S.	G.	M.	S.	S.	G.	M.	S.
an.	00	00	0	0	0	0	0	0
eb.	00	00	0	36	0	17	54	47
Mar.	00	00	1	10	0	11	26	41
pr.	00	00	1	46	0	29	21	28
Mai.	00	00	2	21	1	5	4	48
un.	00	00	2	57	1	22	59	35
ul.	00	00	3	32	1	28	42	55
ug.	00	00	4	8	2	16	37	42
ept	00	00	4	44	3	4	32	29
Oct.	00	00	5	19	3	10	15	49
Nou	00	00	5	55	3	28	10	36
Dec.	00	00	6	30	4	3	53	56
An.	00	00	7	12	4	21	48	47
nt.								

Æqu. mot' Centri Sol. Long. Lun. a Sole.

Dies	S.	G.	M.	S.	S.	G.	M.	S.
1	00	00	00	1	0	12	11	26
2	00	00	00	2	0	24	22	53
3	00	00	00	3	1	6	34	20
4	00	00	00	4	1	18	45	46
5	00	00	00	5	2	0	57	13
6	00	00	00	7	2	13	8	40
7	00	00	00	8	2	25	20	6
8	00	00	00	9	3	7	31	33
9	00	00	00	10	3	19	43	0
10	00	00	00	11	4	1	54	26
11	00	00	00	13	4	14	5	53
12	00	00	00	14	4	26	17	20
13	00	00	00	15	5	8	28	46
14	00	00	00	16	5	20	40	13
15	00	00	00	17	6	2	51	40
16	00	00	00	18	6	15	3	7
17	00	00	00	20	6	27	14	33
18	00	00	00	21	7	9	26	0
19	00	00	00	22	7	21	37	27
20	00	00	00	23	8	3	48	53
21	00	00	00	24	8	16	0	20
22	00	00	00	26	8	28	11	47
23	00	00	00	27	9	10	23	13
24	00	00	00	28	9	22	34	40
25	00	00	00	29	10	4	46	7
26	00	00	00	30	10	16	57	33
27	00	00	00	31	10	29	9	0
28	00	00	00	33	11	11	20	27
29	00	00	00	34	11	23	31	54
30	00	00	00	35	0	5	43	20
31	00	00	00	36	0	17	54	47

Tabula. IX. Long. Lun. & Centr. Sol. in Dieb.

Elongatio Lunæ a Centro Excentr.

Tabula X. Parallax.

Grad. al titudinis	Parallaxis Solis.	92028	93798	95568	97337	99107	100877	102647	104416	106186	107956
		M.	M.	M.	M.	M.	M.	M.	M.	M.	M.
0	1	66	65	64	63	61	60	59	58	57	56
3	3	66	65	64	62	61	60	59	58	57	56
6	3	66	65	63	62	61	60	59	58	57	56
9	3	65	64	63	62	61	60	59	58	57	56
12	3	65	64	62	61	60	59	58	57	56	55
15	3	64	63	62	61	60	59	58	57	56	55
18	3	63	62	61	60	59	58	57	56	55	54
21	3	62	61	60	59	58	57	56	55	54	53
24	3	61	60	59	58	56	55	54	54	53	52
27	3	60	58	57	56	55	54	53	52	51	51
30	3	58	57	56	55	54	53	52	51	50	49
33	3	56	55	54	53	52	51	50	49	48	48

Parallaxis Lunæ.

40	44	42	40	38	36	34	31	29	26	23	20	18	15	12	9	6	3	0
47	45	43	41	39	37	34	32	29	26	24	21	18	15	12	9	6	3	0
48	46	44	42	39	37	35	32	30	27	24	21	18	15	12	9	6	3	0
48	47	45	42	40	38	35	33	30	27	25	22	19	16	13	9	6	3	0
49	47	45	43	41	38	36	33	31	28	25	22	19	16	13	10	6	3	0
50	48	46	44	42	39	37	34	31	28	25	22	19	16	13	10	7	3	0
51	49	47	45	42	40	37	35	32	29	26	23	20	16	13	10	7	3	0
52	50	48	46	43	41	38	35	32	29	26	23	20	17	13	10	7	3	0
53	51	49	46	44	41	39	36	33	30	27	24	20	17	14	10	7	3	0
54	52	50	47	45	42	40	37	34	31	27	24	21	17	14	11	7	4	0
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0
36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90

Tabula XI. Syzygiar.

Grad.	Signa ☌ In veris Syzygijs. M.	S.	Signa ☌ Ante & post veras Syzygias. M.	S.	Signa ♈. In veris Syzygijs. M.	S.	Signa ♈. Ante & post veras Syzygias. M.	S.	Signa ♎ In veris Syzygijs. M.	S.	Signa ♎ Ante & post veras Syzygias. M.	S.	Grad.
0	27	43	27	12	28	4	27	34	29	1	28	46	30
3	27	44	27	12	28	8	27	39	29	9	28	57	27
6	27	45	27	13	28	13	27	45	29	17	29	8	24
9	27	45	27	14	28	18	27	51	29	25	29	19	21
12	27	47	27	15	28	23	27	58	29	33	29	29	18
15	27	48	27	16	28	29	28	5	29	41	29	41	15
18	27	51	27	19	28	35	28	12	29	49	29	52	12
21	27	53	27	22	28	41	28	20	29	58	30	4	9
24	27	57	27	26	28	47	28	29	30	6	30	17	6
27	28	0	27	30	28	54	28	38	30	15	30	29	3
30	28	4	27	34	29	1	28	46	30	24	30	42	0

Signa ♑. Signa ♑. Signa ♏

Tabula XI. Syzygiar.

Grad'	Signa III.		Signa IV.		Signa V.		Signa VI.		Signa VII.		Signa VIII.		Grad'
	M.	S.	M.	S.	M.	S.	M.	S.	S.	M.	S.	M.	
0	30	24	30	42	31	51	32	53	32	58	34	45	30
3	30	33	30	55	31	58	33	5	33	3	34	53	27
6	30	41	31	7	32	6	33	18	33	7	35	0	24
9	30	50	31	20	32	14	33	3	33	14	35	8	21
12	30	51	31	33	32	21	33	41	33	11	35	14	18
15	31	7	31	46	32	28	33	54	33	17	35	18	15
18	31	17	32	0	32	35	34	5	33	20	35	24	12
21	31	26	32	15	32	41	34	17	33	21	35	29	9
24	31	34	32	28	32	47	34	26	33	23	35	32	6
27	31	43	32	41	32	53	34	36	33	24	35	34	3
30	31	51	32	53	32	58	34	45	33	24	35	37	0

Tabula XII. Aequationis. Dierum natur.

Gradus descen.	Aries.		Taurus.		Gemini.		Gradus ascend.
	Libra.		Scorpius.		Arcitenens.		
	A.		A.		A		
	M.	S.	M.	S.	M.	S.	
0	0	0	8	25	8	47	30
1	0	20	8	36	8	37	29
2	0	40	8	45	8	26	28
3	0	59	8	55	8	15	27
4	1	19	9	4	8	3	26
5	1	39	9	12	7	50	25
6	1	59	9	19	7	36	24
7	2	18	9	26	7	22	23
8	2	38	9	32	7	7	22
9	2	57	9	37	6	52	21
10	3	16	9	42	6	36	20
11	3	35	9	46	6	20	19
12	3	51	9	50	6	3	18
13	4	12	9	52	5	46	17
14	4	30	9	54	5	28	16
15	4	47	9	56	5	10	15
16	5	5	9	56	4	51	14
17	5	22	9	56	4	32	13
	S		S.		S.		
	Pisces.		Aquar.		Capric.		
	Virgo.		Leo.		Cancer.		

Gradus descend.	Aries.	Taurus.	Gemini.	Gradus ascend.
	Libra. A.	Scorpius. A.	Arcitenens. A.	
	M. S.	M. S.	M. S.	
18				
19	5 38	9 55	4 12	12
20	5 55	9 53	3 53	11
21	6 11	9 51	3 33	10
22	6 26	9 48	3 12	9
23	6 41	9 44	2 51	8
24	6 56	9 40	2 31	7
25	7 10	9 34	2 9	6
26	7 24	9 28	1 48	5
27	7 37	9 21	1 27	4
28	7 50	9 14	1 5	3
29	8 2	9 6	0 43	2
30	8 14	8 57	0 22	1
	8 25	8 47	0 0	0
	S.	S.	S.	
	Pisces.	Aquarius.	Capricor.	
	Virgo.	Leo.	Cancer.	

Tabula XIII. Semidiametrorum.

Signa.	Anomalia Sol. & Lunæ. Gradus.	Semidiameter Solis.		Semidiameter Lunæ.		Variatio Lunæ. Auser.		Semidiameter vmbræ.		Variatio Vmbræ. Auctr.		Signa.	Anomalia Sol. & Lunæ. Gradus.
		M.	S.	M.	S.	S.	M.	S.	S.				
0		16	47	15	0	38	39	0	0	0			
	10	16	48	15	1	38	39	2	1				30
	20	16	50	15	3	37	39	8	2				20
1	30	16	52	15	9	36	39	19	4				10
	10	16	55	15	16	32	39	41	6	11			30
	20	16	59	15	24	29	40	2	10				20
2	30	17	4	15	35	25	40	31	14				10
	10	17	10	15	47	20	41	2	19	10			30
	20	17	15	16	0	12	41	36	24				20
3	30	17	21	16	14	3	42	12	28				10
						A.							
	10	17	27	16	28	1	42	49	32	9			30
	20	17	33	16	44	11	43	27	37				20
4	30	17	39	16	58	20	1	5	42				10
	10	17	4	17	12	30	44	4	47	8			30
	20	17	50	17	25	39	45	17	50				20
5	30	17	54	17	35	47	45	43	53				10
	10	17	56	17	43	53	46	4	55	7			30
	20	17	58	17	48	56	46	16	57				20
	30	17	59	17	49	58	46	19	58				10

		H.	M.	Longitudo G.	M.	Latitudo G.	M.
Aginnum.	S.	0	15	20	40	43	30
Albia.	S.	0	6	22	30	43	40
Alexandria Aeg.	A.	2	26	60	30	30	58
Antuerpia.	A.	0	14	27	35	57	12
Anicium.	A.	0	2	24	30	44	15
Aracta Syriæ.	A.	3	6	70	30	36	0
Arbela Assiriæ.	A.	3	44	80	0	37	15
Argentina.	A.	0	30	31	30	48	30
Auenio.	A.	0	13	27	15	42	35
Augusta Vind.	A.	0	45	35	10	48	22
Ausois.	S.	0	15	20	15	43	0
Babylon.	A.	3	16	73	0	35	0
Basilea.	A.	0	29	31	15	47	38
Biterræ.	S.	0	2	23	30	42	20
Burdegala.	S.	0	24	18	0	44	30
Cadurcum.	S.	0	8	22	0	44	0
Cæsaraugusta.	S.	0	41	14	1	41	45
Capua.	A.	1	8	40	55	41	42
Carcassona.	S.	0	5	22	45	41	50
Clarus Mons.	S.	0	5	22	50	44	50
Colonia.	A.	0	26	30	30	50	55
Compostella.	S.	2	55	11	45	43	0
Constantinopolis.	A.	2	8	56	0	43	5
Corinthus.	A.	1	48	51	15	36	50
Conimbrica.	S.	1	15	5	45	40	30

		H.	M	Longitudo G.	M	Latitudo GM.	
Ephesus.	A.	2	8	68	0	37	40
Florentia.	A.	0	40	34	0	43	40
Fruemburgum.	A.	1	26	45	30	54	22
Gandauum.	A.	0	11	26	45	51	4
Genua.	A.	0	24	30	0	43	50
Granata.	S.	0	52	11	0	37	50
Goa.	A.	6	10	115	0	17	0
Goeza Zeland.	A.	0	6	25	30	51	31
Hafnia Daniæ.	A.	0	51	36	40	55	43
Hispalis.	S.	1	2	7	15	37	0
Hierosolyma.	A.	2	48	60	0	31	40
Lectora.	S.	0	16	20	0	43	25
Lemouica.	S.	0	10	21	30	45	45
Lugdunum.	A.	0	3	23	15	45	10
Lutetia.		0	0	24	0	48	45
Massilia.	A.	0	2	24	30	43	10
Mantua.	A.	0	36	33	0	44	30
Monspelium.	A.	0	2	24	30	42	50
Mons reg. Boruss.	A.	1	31	46	45	54	21
Mons reg Franc.	A.	0	29	31	20	50	15
Mediolanum.	A.	0	28	31	0	45	6
Narbona.	S.	0	2	23	30	43	0
Neapolis Ital.	A.	1	2	39	30	41	0
Perpinianum.	S.	0	2	23	30	41	10
Petragoricum.	S.	0	11	21	15	44	40
Montalbanum.	S.	0	10	21	30	43	30

Latitudinis Vrbium Insignium.

		H.	M.	Longitudo G.	M.	Latitudo G.	M.
Pictaui.	S.	0	16	20	0	46	35
Praga.	A.	0	58	38	30	50	6
Roma.	A.	0	50	36	30	41	56
Rothomagus.	S.	0	5	22	40	49	0
Rupella.	S.	0	23	18	15	45	15
Rutenæ.	S.	0	3	23	15	43	30
Salmantica.	S.	1	7	8	50	40	15
Sanflorus.	S.	0	2	23	30	44	0
Sardes Asiæ.	A.	2	20	58	45	38	15
Syracusæ.	A.	1	3	40	30	37	30
Tarentum.	A.	1	26	45	30	40	0
Toletum.	S.	0	56	10	0	40	0
Tolosa.	S.	0	14	20	30	43	20
Venetiæ.	A.	0	40	34	0	45	0
Vienna.	A.	0	55	37	45	48	20
Vlyssipona.	S.	1	18	5	10	39	38
Vranoburgũ. Tichonis.	A.	0	51	36	45	55	54

VSVS TABVLAE SVPERIORIS.

Motuum Tabulæ meridiano Parisino affixæ sunt, quas vt ad regiones orbis reliquas transferas, post verũ vel apparens temporis momentũ, ex Tabulis conflatum adi Tabulam XII, in qua vrbibus insignioribus tempus cum longitudine adscribitur, vbi si fuerit A litera, tempus inuentum adiice ad id quod ex tabulis excerptum est, si litera S. Subtrahe.

Tabula XV. Ascensionum Rectarum.

Aries.			Taur.		Gem.	
G.	G.	M.	G.	M.	G.	M.
0	0	0	27	53	57	48
1	0	55	28	51	58	50
2	1	50	29	48	59	53
3	2	45	30	46	60	56
4	3	40	31	44	61	59
5	4	35	32	42	63	2
6	5	30	33	40	64	5
7	6	25	34	38	65	9
8	7	20	35	36	66	13
9	8	15	36	35	67	16
10	9	11	37	34	68	20
11	10	6	38	33	69	24
12	11	1	39	32	70	29
13	11	57	40	31	71	33
14	12	52	41	31	72	37
15	13	48	42	31	73	42
16	14	43	43	30	74	47
17	15	39	44	30	75	51
18	16	35	45	31	76	56
19	17	31	46	31	78	1
20	18	27	47	32	79	6
21	19	23	48	32	80	11
22	20	19	49	33	81	17
23	21	15	50	35	82	22
24	22	12	51	36	83	27
25	23	8	52	37	84	32
26	24	5	53	39	85	38
27	25	2	54	41	86	43
28	25	59	55	43	87	49
29	26	56	56	45	88	54
30	27	53	57	48	90	0

Canc.			Leo.		Virg.	
G.	G.	M.	G.	M.	G.	M.
0	90	0	122	11	152	6
1	91	5	123	14	153	3
2	92	10	124	16	154	0
3	93	16	125	18	154	57
4	94	21	126	20	155	54
5	95	27	127	22	156	51
6	96	32	128	23	157	47
7	97	37	129	24	158	44
8	98	42	130	26	159	40
9	99	48	131	27	160	36
10	100	53	132	27	161	32
11	101	58	133	28	162	28
12	103	3	134	28	163	24
13	104	8	135	29	164	20
14	105	12	136	29	165	16
15	106	17	137	28	166	11
16	107	22	138	28	167	7
17	108	26	139	28	168	2
18	109	30	140	27	168	58
19	110	35	141	26	169	53
20	111	39	142	25	170	48
21	112	43	143	24	171	44
22	113	46	144	23	172	39
23	114	50	145	21	173	34
24	115	54	146	19	174	29
25	116	57	147	17	175	24
26	118	0	148	15	176	19
27	119	3	149	13	177	14
28	120	6	150	11	178	9
29	121	9	151	8	179	4
30	122	11	152	6	180	0

Tabula XV. Ascensionum rectarum.

	Libra		Scorp.		Sagitt.	
G.	G.	M.	G.	M.	G.	M.
0	180	0	207	53	237	48
1	180	55	208	51	238	50
2	181	50	209	48	239	53
3	182	45	210	46	240	56
4	183	40	211	44	241	59
5	184	35	212	42	243	2
6	185	30	213	40	244	5
7	186	25	214	38	245	9
8	187	20	215	36	246	13
9	188	15	216	35	247	16
10	189	11	217	34	248	20
11	190	6	218	33	249	24
12	191	1	219	32	250	29
13	191	57	220	31	251	33
14	192	52	221	31	252	37
15	193	48	222	31	253	42
16	194	43	223	30	254	47
17	195	39	224	30	255	51
18	196	35	225	31	256	56
19	197	31	226	31	258	1
20	198	27	227	32	259	6
21	199	23	228	32	260	11
22	200	19	229	33	261	17
23	201	15	230	35	262	22
24	202	12	231	36	263	27
25	203	8	232	37	264	32
26	204	5	233	39	265	38
27	205	2	234	41	266	43
28	205	59	235	43	267	49
29	206	56	236	45	268	54
30	207	53	237	48	270	0

Tabula XV. Ascensionum Rectarum.

Capric.		Aquar.		Pisc.	
G.	G. M.	G.	M.	G.	M.
0	270 0	302	11	332	6
1	271 5	303	14	333	3
2	272 10	304	16	334	0
3	273 16	305	18	334	57
4	274 21	306	20	335	54
5	275 27	307	22	336	51
6	276 32	308	23	337	47
7	277 37	309	24	338	44
8	278 42	310	26	339	40
9	279 48	311	27	340	36
10	280 53	312	27	341	32
11	281 58	313	28	342	28
12	283 3	314	28	343	24
13	284 8	315	29	344	20
14	285 12	316	29	345	16
15	286 17	317	28	346	11
16	287 22	318	28	347	7
17	288 26	319	28	348	2
18	289 30	320	27	348	58
19	290 35	321	26	349	53
20	291 39	322	25	350	48
21	292 43	323	24	351	44
22	293 46	324	23	252	39
23	294 50	325	21	353	34
24	295 54	326	19	354	29
25	296 57	327	17	355	24
26	298 0	328	15	356	19
27	299 3	329	13	357	14
28	300 6	330	11	358	9
29	301 9	331	8	359	4
30	302 11	332	6	360	0

Tabula 8ª

Canon integer Latitudinis *Lunæ*.

Bor.	*Sig.* 0.	*Sig.* 1.	*Sig.* 2.	*Desc.*
Aust.	*Sig.* 6.	*Sig.* 7.	*Sig.* 8.	*Asc.*

Gradus.	*Latit.* G.	M.	S.	*Excess.* M.	S.	*Latit.* G.	M.	S.	*Excess.* M.	S.	*Latit.* G.	M.	S.	*Excess.* M.	S.
0	0	0	0	0	0	2	29	52	7	0	4	19	43	13	30
1	0	5	14	0	0	2	34	22	8	0	4	22	18	14	29
2	0	10	27	0	0	2	38	50	8	0	4	24	49	14	28
3	0	15	41	0	0	2	43	15	8	0	4	27	14	14	27
4	0	20	54	1	0	2	47	37	8	0	4	29	34	14	26
5	0	26	7	1	0	2	51	56	9	0	4	31	50	14	25
6	0	31	19	1	0	2	56	11	9	0	4	34	0	14	24
7	0	36	31	1	0	3	0	24	9	0	4	36	6	14	23
8	0	41	42	2	0	3	4	33	9	0	4	38	6	14	22
9	0	46	52	2	0	3	8	39	10	0	4	40	2	14	21
10	0	52	2	2	0	3	12	42	10	0	4	41	52	15	20
11	0	57	10	3	0	3	16	41	10	0	4	43	37	15	19
12	1	2	18	3	0	3	20	36	10	0	4	45	17	15	18
13	1	7	24	3	0	3	24	28	10	0	4	46	52	15	17
14	1	12	29	3	0	3	28	16	11	0	4	48	21	15	16
15	1	17	33	4	0	3	32	0	11	0	4	49	45	15	15
18	1	32	36	4	0	3	42	49	11	0	4	53	26	15	12
21	1	47	24	5	0	3	53	2	12	0	4	56	18	15	9
24	2	1	54	6	0	4	2	36	12	0	4	58	21	15	6
27	2	16	4	7	0	4	11	30	13	0	4	59	35	15	3
30	2	29	52	7	0	4	19	43	13	0	5	0	0	16	0

Aust.	*Sig.* 11.	*Sig.* 10.	*Sig.* 9.	*Asc.*
Bor.	*Sig.* 5.	*Sig.* 4.	*Sig.* 3.	*Desc.*

DECLINATIO

ECLIPTICÆ.

DATA maiori Declinatione Ecliptice ab Aequatore inuenire Declinationem cuiuſ-umque puncti eiuſdem Ecliptice a propiore Aequinoctio numerati, initio ſcilicet Arietis ut Libræ. Ab Ariete ad Libram intercedunt 80 Gradus: & a Libra ad Arietem alij itidem 80, qui ſimul conflant 360 Gradus ſeu 12 ſigna: quare dato Arcu recognoſce a quo Æquinoctio propius diſtet illamque diſtantiã aſſume d operandum & indagandam declinationem. ta ſi Arcus datus ſit 4 ſignorum ſeu 120 gradum: propius diſtat a Libra quam ab Ariete: quare aſſumo ad operationem duo ſigna ſeu o gradus quibus arcus datus diſtat a Libra.

Si arcus ſeu punctum ſit 66 Graduum um illi ipſi 66 Gradus ſunt aſſumendi ad opeandũ quia ſunt viciniores Arieti quam Libræ.

PRAXIS.

Vt ſe habet ſinus totus		1000000
Ad ſinum maximæ Declin.	23. G. 31.	960099
Ita ſinus Arcus dati	66	996078
Summa ex addit. Logarith.		1956177
Ad ſin. Declin. quæſitæ.	21. 23.	956177

n hac praxi facta eſt additio ſecundi & tertij Logar. & ex ſumma ſubtractus eſt ſinus totus, Reſiduum eſt Logarithmus quæſitus.

ANGVLVS MERIDIANI ET ECLIPTICÆ.

DATA puncti dati in Ecliptica declinatione & maieri eiusdem Ecliptica declinatione inuenire angulum obliquum Meridiani cum Ecliptica.

Vtse habet sin. Compl. Dec. datæ 14.g.1.*m.* 998687
Ad sin. Complem. Maioris Decl. 23.31. 996234
Ita sin. totus. 1000000
Summa ex additione Logar. 1996234
Ad. Angulum quæsitum. 71..g. 8. *m.* 997541

Ab initio Cancri ad initium Capricorni angulus Meridiani & Ecliptica exterior, *ortum* versus maior est recto; *occasum* versus est recto minor. Contra ab initio Capricorni ad initium Cancri idem angulus *ortum* versus est recto minor; & *occasum* versus recto maior.

PERIODVS IVLIANA.

Periodus Iuliana est annorum aggregatum, conflatum ex cycli Solaris 28, *& Lunaris* 19 *seu aurei numeri continua multiplicatione ex qua producitur numerus* 532 *annorum, qui si iterum per indictionem seu* 15 *annos multiplicetur, dabit periodum annorum* 7980 *quæ Iuliana dicitur.*

VSVS SVPERIORVM TABVLARVM.

CANON. I.

EPOCHA seu radix est momentum illud a quo tempora numeramus, indicat enim locum, quem sidus determinato & nuncupato tempore occupat.

EPOCHAE SEV RADICES MOTVVM SOLARIVM.

Anno primo Periodi Iulianæ a mediâ Nocte ante Kal. Ian. Lutetiæ.

	S.	G.	M.	S.
Æq. Motus Sol.	8	2	58	16
Apog. Sol.	11	6	41	52
Cent. Sol.	5	3	56	3

MOTVVM LVNARIVM.

Eodem Anno & horâ.

	S.	G.	M.	S.
Long. Lun. a Sol.	4	7	53	43
Anomal. Lun.	0	29	7	49
Lat. Lun. a Nod.	9	5	0	16

Si numeras ab initio Per. Iul. adde radices superiores summæ motuum collectorum pro diuersitate eorumdem motuum.

RADICES MOTVVM SOLARIVM

Anno Peri. Iul. 3930 a mediâ nocte Lutetiæ

	S.	G.	M.	S.
Æq. Motus Sol.	9	2	11	2
Apog. Sol.	1	20	26	49
Centri Sol.	8	25	51	23

MOTVVM LVNARIVM.

Eodem Anno & horâ.

	S.	G.	M.	S.
Long.Lun.a Sol.	7	26	56	57
Anomal. Lun.	2	29	53	6
Lat.Lun.a Nodis	6	16	47	31

Vtere his radicibus si annus Per. Iul. datus maior sit anno 3930; Tumque differentiam sume anni dati & anni 3930, motusque differentiæ respondentes adde radicibus constitutis anno 3930.

RADICES MOTVVM SOLARIVM.

Anno Christi primo a media nocte Lutetiæ.

	S.	G.	M.	S.
Æq. Motus Sol.	9	8	6	43
Apog. Sol.	2	5	9	30
Centri Sol.	0	0	0	0

MOTVVM LVNARIVM.

Eodem Anno & horâ.

	S.	G.	M.	S.
Long.Lun.a Sol.	7	0	38	15
Anomal. Lun.	6	27	22	8
Lat.Lun.a Nodis	7	10	23	10

Superiores radices adde summæ Motuum collectorum si a Christo numeras.

ANNI BISSEXTILES IN PER. IVL.

1. 5. 9. 13. 17. 21. 25. 29.
33. 37. 41. 45. 49. 53. 57. 61.
65. 69. 73. 77. 81. 85. 89. 93.
97.

ANNI IN AERA CHRISTIANA BISSEXTILES.

0. 4. 8. 12. 16. 20. 24. 28.
32. 36. 40. 44. 48. 52. 56. 60.
64. 68. 72. 76. 80. 84. 88. 92.
96. 100.

Si Kalendario veteris Gregoriano & post annum 1582 putas tempora, de summa annorum deducendi sunt dies decem.

CANON II.

CVIVSVIS temporis dati medios Solis Motus inuenire.

Si tempus datum numeratur a Christo Dati temporis Motus excerpe ex Tabula prima annorum, tum menstruos motus colligito de Tabula II mensium pro anni ratione Communis aut Bissextilis. Denique Dierum Horarum & Minutorum seu scrupulorum motus sume ex Tabul. III. & IV. summam demum ex omnibus confla, summæque conflatæ radicem Anni Christi adde, si ex additione signa plura sunt 12 tum circulum integrum reiicito.

EXEMPLVM.

Quæratur Solis motus medius anno Christi

1578 Septembr. 16, horæ post mediam noctem 10, min. 58. quo ex Petauio plenilunium Lutetiæ contigit Eclipticum.

		S.	G.	M.	S.
Anni	1000.	00	7	33	45
Anni	500.	00	3	46	52
Anni completi.	77.	00	0	20	7
Septemb. commun.		7	29	30	41
Dies completi	15.	00	14	47	4
Horæ	10			24	38
Min.	58			2	25
Radix Christi		9	8	6	43
Summa.		6	4	32	15

CANON III.

EXEMPLVM.

Motus Apogæi eodem plenilunio.

PRAXIS est eadem quæ supra, hoc tamen monendus es in diebus & horis contemni propter exiguitatem, Apogæi motum.

		S.	G.	M.	S.
Anni	1000	00	18	45	55
Anni	500	00	9	22	57
Anni	77	00	1	26	41
Sept. comm.		00	00	00	40
Radix Chr.		2	5	9	30
Summa.		3	4	45	43

Hanc summam si a superiori Motus Solis summâ, 6, 4, 32, 15, subtrahas, efficies Anomaliam Solis in eodem Plenilunio. 2, 29, 46, 36.

CANON. IV.

ÆQVALIS motus Lunæ a Sole item Latitudinis Lunæ, Centri Solis, & Anomaliæ Lunæ inueniuntur eadem methodo & arte quâ motus Solis, pro æquali motu Lunæ a Sole, & motu Centri Solis, adeundæ sunt Tabulæ. 7. 8. 9. Motum Lunæ in horis & minutis habes in Tabula 4. At motus Centri in horis & minutis vacat.

Si non a Christo eosdem motus & tempora qui supra putes, sed ab annis Periodi Iulianæ tum duplices vsurpari possunt radices, vel eæ ipsæ anni primi Periodi Iulianæ, vel radices anni Periodi Iulianæ 3930, si annus tuus Periodi Iulianæ maior sit anno 3930 eiusdem Periodi.

In primo casu praxis eadem est quæ supra: colligendi enim sunt motus annorum qui fluxere a primo anno Periodi Iulian. illisque motibus addendæ radices anni primi Per. Iul. In secundo casu obserua. is est excessus seu differentia anni Periodi tui dati, ab anno Per. Iul. 3930, tum motus huius differentiæ quærendi illisque motibus addendæ radices anni 3930.

EXEMPLVM.

Plenilunium de quo supra contigit anno Period. Iul. 6291 completo: excessus seu differentia a 3930 est 2361. Quæro iam motum latitudinis.

Tabula XV. Ascensionum Rectarum.

	Libra		Scorp.		Sagitt.	
⁰.	G.	M.	G.	M.	G.	M.
0	180	0	207	53	237	48
1	180	55	208	51	238	50
2	181	50	209	48	239	53
3	182	45	210	46	240	56
4	183	40	211	44	241	59
5	184	35	212	42	243	2
6	185	30	213	40	244	5
7	186	25	214	38	245	9
8	187	20	215	36	246	13
9	188	15	216	35	247	16
10	189	11	217	34	248	20
11	190	6	218	33	249	24
12	191	1	219	32	250	29
13	191	57	220	31	251	33
14	192	52	221	31	252	37
15	193	48	222	31	253	42
16	194	43	223	30	254	47
17	195	39	224	30	255	51
18	196	35	225	31	256	56
19	197	31	226	31	258	1
20	198	27	227	32	259	6
21	199	23	228	32	260	11
22	200	19	229	33	261	17
23	201	15	230	35	262	22
24	202	12	231	36	263	27
25	203	8	232	37	264	32
26	204	5	233	39	265	38
27	205	2	234	41	266	43
28	205	59	235	43	267	49
29	206	56	236	45	268	54
30	207	53	237	48	270	0

Capric.			Aquar.		Pisc.	
G.	G.	M.	G.	M.	G.	M.
0	270	0	302	11	332	6
1	271	5	303	14	333	3
2	272	10	304	16	334	0
3	273	16	305	18	334	57
4	274	21	306	20	335	54
5	275	27	307	22	336	51
6	276	32	308	23	337	47
7	277	37	309	24	338	44
8	278	42	310	26	339	40
9	279	48	311	27	340	36
10	280	53	312	27	341	32
11	281	58	313	28	342	28
12	283	3	314	28	343	24
13	284	8	315	29	344	20
14	285	12	316	29	345	16
15	286	17	317	28	346	11
16	287	22	318	28	347	7
17	288	26	319	28	348	2
18	289	30	320	27	348	58
19	290	35	321	26	349	53
20	291	39	322	25	350	48
21	292	43	323	24	351	44
22	293	46	324	23	252	39
23	294	50	325	21	353	34
24	295	54	326	19	354	29
25	296	57	327	17	355	24
26	298	0	328	15	356	19
27	299	3	329	13	357	14
28	300	6	330	11	358	9
29	301	9	331	8	359	4
30	302	11	332	6	360	0

Canon integer Latitudinis *Lunæ*.

Bor.	*Sig.* 0.	*Sig.* 1.	*Sig.* 2.	*Desc.*
Auſt.	*Sig.* 6.	*Sig.* 7.	*Sig.* 8.	*Aſc.*

Graduſ.	*Latit.* G. M.	*Exceſ.* S. M.	*Latit.* G. M.	*Exceſ.* S. M.	*Latit.* G. M.	*Exceſ.* S. M.	
0	0 0	0 0	2 29	52	7 4 19	43	13 30
1	0 5	14	2 34	22	8 4 22	18	14 29
2	0 10	27	2 38	50	8 4 24	49	14 28
3	0 15	41	2 43	15	8 4 27	14	14 27
4	0 20	54	1 2 47	37	8 4 29	34	14 26
5	0 26	7	1 2 51	56	9 4 31	50	14 25
6	0 31	19	1 2 56	11	9 4 34	0	14 24
7	0 36	31	1 3	0 24	9 4 36	6	14 23
8	0 41	42	2 3	4 33	9 4 38	6	14 22
9	0 46	52	2 3	8 39	10 4 40	2	14 21
10	0 52	2	2 3	12 42	10 4 41	52	15 20
11	0 57	10	3 3	16 41	10 4 43	37	15 19
12	1 2	18	3 3	20 36	10 4 45	17	15 18
13	1 7	24	3 3	24 28	10 4 46	52	15 17
14	1 12	29	3 3	28 16	11 4 48	21	15 16
15	1 17	33	4 3	32 0	11 4 49	45	15 15
18	1 32	36	4 3	42 49	11 4 53	26	15 12
21	1 47	24	5 3	53 2	12 4 56	18	15 9
24	2 1	54	6 4	2 36	12 4 58	21	15 6
27	2 16	4	7 4	11 30	13 4 59	35	15 3
30	2 29	52	7 4	19 43	13 5 0	0	16 0

Auſt.	*Sig.* 11.	*Sig.* 10.	*Sig.* 9.	*Aſc.*
Bor.	*Sig.* 5.	*Sig.* 4.	*Sig.* 3.	*Deſc.*

DECLINATIO

ECLIPTICÆ.

DATA maiori Declinatione Ecliptice ab Aequatore inuenire Declinationem cuiuscunque puncti eiusdem Ecliptice a propiore Aequinoctio numerati, initio scilicet Arietis aut Libræ. Ab Ariete ad Libram intercedunt 180 Gradus: & a Libra ad Arietem alij itidem 180, qui simul conflant 360 Gradus seu 12 signa: quare dato Arcu recognosce a quo Æquinoctio propius distet illamque distantiã assume ad operandum & indagandam declinationem. Ita si Arcus datus sit 4 signorum seu 120 graduum: propius distat a Libra quam ab Ariete: quare assumo ad operationem duo signa seu 60 gradus quibus arcus datus distat a Libra.

Si arcus seu punctum sit 66 Graduum tum illi ipsi 66 Gradus sunt assumendi ad operandũ quia sunt viciniores Arieti quam Libræ.

PRAXIS.

Vt se habet sinus totus		1000000
Ad sinum maximæ Declin.	23. G. 31.	960099
Ita sinus Arcus dati	66	996078
Summa ex addit. Logarith.		1956177
Ad sin. Declin. quæsitæ.	21. 23.	956177

In hac praxi facta est additio secundi & tertij Logar. & ex summa subtractus est sinus totus, Residuum est Logarithmus quæsitus.

ANGVLVS ME-

RIDIANI ET ECLIPTICÆ.

DATA puncti dati in Ecliptica declinatione & maieri eiusdem Ecliptica declinatione inuenire angulum obliquum Meridiani cum Ecliptica.

Vt se habet. sin. Compl. Dec. datæ 14. g. 1. *m.* 998687
Ad sin. Complem. Maioris Decl. 23. 31. 996234
Ita sin. totus. 1000000
Summa ex additione Logar. 1996234
Ad. Angulum quæsitum. 71. g. 8. *m.* 997541

Ab initio Cancri ad initium Capricorni angulus Meridiani & Eclipticæ exterior, *ortum* versus maior est recto; *occasum* versus est recto minor. Contra ab initio Capricorni ad initium Cancri idem angulus *ortum* versus est recto minor; & *occasum* versus recto maior.

PERIODVS

IVLIANA.

Periodus Iuliana est annorum aggregatum, conflatum ex cycli Solaris 28, *& Lunaris* 19 *seu aurei numeri continua multiplicatione ex qua producitur numerus* 532 *annorum, qui si iterum per indictionem seu* 15 *annos multiplicetur, dabit periodum annorum* 7980 *quæ Iuliana dicitur.*

VSVS SVPERIORVM TABVLARVM.

CANON. I.

EPOCHA seu radix est momentum illud a quo tempora numeramus, indicat enim locum, quem sidus determinato & nuncupato tempore occupat.

EPOCHAE SEV RADICES MOTVVM SOLARIVM.

Anno primo Periodi Iulianæ a mediâ Nocte ante Kal. Ian. Lutetiæ.

	S.	G.	M.	S.
Æq. Motus Sol.	8	2	58	16
Apog. Sol.	11	6	41	52
Cent. Sol.	5	3	56	3

MOTVVM LVNARIVM.

Eodem Anno & hora.

	S.	G.	M.	S.
Long. Lun. a Sol.	4	7	53	43
Anomal. Lun.	0	29	7	49
Lat. Lun. a Nod.	9	5	0	16

Si numeras ab initio Per. Iul. adde radices superiores summæ motuum collectorum pro diuersitate eorumdem motuum.

RADICES MOTVVM SOLARIVM

Anno Peri. Iul. 3930 a mediâ nocte Lutetiæ

	S.	G.	M.	S.
Æq. Motus Sol.	9	2	11	2
Apog. Sol.	1	20	26	49
Centri Sol.	8	25	51	23

MOTVVM LVNARIVM.

Eodem Anno & horâ.

	S.	G.	M.	S.
Long.Lun.a Sol.	7	26	56	57
Anomal. Lun.	2	29	53	6
Lat.Lun.a Nodis	6	16	47	31

Vtere his radicibus si annus Per. Iul. datus maior sit anno 3930; Tumque differentiam sume anni dati & anni 3930, motusque differentiæ respondentes adde radicibus constitutis anno 3930.

RADICES MOTVVM SOLARIVM.

Anno Christi primo a media nocte Lutetiæ.

	S.	G.	M.	S.
Æq. Motus Sol.	9	8	6	43
Apog. Sol.	2	5	9	30
Centri Sol.	0	0	0	0

MOTVVM LVNARIVM.

Eodem Anno & horâ.

	S.	G.	M.	S.
Long.Lun.a Sol.	7	0	38	15
Anomal. Lun.	6	27	22	8
Lat.Lun.a Nodis	7	10	23	10

Superiores radices adde summæ Motuum collectorum si a Christo numeras.

ANNI BISSEXTILES IN PER. IVL.

1. 5. 9. 13. 17. 21. 25. 29.
33. 37. 41. 45. 49. 53. 57. 61.
65. 69. 73. 77. 81. 85. 89. 93.
97.

ANNI IN AERA CHRISTIANA BISSEXTILES.

0. 4. 8. 12. 16. 20. 24. 28.
32. 36. 40. 44. 48. 52. 56. 60.
64. 68. 72. 76. 80. 84. 88. 92.
96. 100.

Si Kalendario veteris Gregoriano & post annum 1582 putas tempora, de summa annorum deducendi sunt dies decem.

CANON II.

CVIVSVIS temporis dati medios Solis Motus inuenire.

Si tempus datum numeratur a Christo Dati temporis Motus excerpe ex Tabula prima annorum, tum menstruos motus colligito de Tabula II mensium pro anni ratione Communis aut Bissextilis. Denique Dierum Horarum & Minutorum seu scrupulorum motus sume ex Tabul. III. & IV. summam demum ex omnibus confla, summæque conflatæ radicem Anni Christi adde, si ex additione signa plura sunt 12 tum circulum integrum reiicito.

EXEMPLVM.

Quæratur Solis motus medius anno Christi

1578 Septembr. 16, horæ post mediam noctem 10, min. 58. quo ex Petauio plenilunium Lutetiæ contigit Eclipticum.

		S.	G.	M.	S.
Anni	1000.	00	7	33	45
Anni	500.	00	3	46	52
Anni completi.	77.	00	0	20	7
Septemb. commun.		7	29	30	41
Dies completi	15.	00	14	47	4
Horæ	10			24	38
Min.	58			2	25
Radix Christi		9	8	6	43
Summa.		6	4	32	15

CANON III.

EXEMPLVM.

Motus Apogæi eodem plenilunio.

PRAXIS est eadem quæ supra, hoc tamen monendus es in diebus & horis contemni propter exiguitatem, Apogæi motum.

		S.	G.	M.	S.
Anni	1000	00	18	45	55
Anni	500	00	9	22	57
Anni	77	00	1	26	41
Sept. comm.		00	00	00	40
Radix Chr.		2	5	9	30
Summa.		3	4	45	43

Hanc summam si a superiori Motus Solis summâ, 6, 4, 32, 15, subtrahas, efficies Anomaliam Solis in eodem Plenilunio. 2, 29, 46, 36.

CANON. IV.

ÆQVALIS motus Lunæ a Sole item Latitudinis Lunæ, Centri Solis, & Anomaliæ Lunæ inueniuntur eadem methodo & arte quâ motus Solis. pro æquali motu Lunæ a Sole, & motu Centri Solis, adeundæ sunt tabulæ. 7. 8. 9. Motum Lunæ in horis & minutis habes in Tabula 4. At motus Centri in horis & minutis vacat.

Si non a Christo eosdem motus & tempora ui supra putes, sed ab annis Periodi Iulianæ um duplices vsurpari possunt radices, vel eæ psæ anni primi Periodi Iulianæ, vel radices nni Periodi Iulianæ 3930, si annus tuus Periodi Iulianæ maior sit anno 3930 eiusdem Periodi.

In primo casu praxis eadem est quæ supra: olligendi enim sunt motus annorum qui fluere a primo anno Periodi Iulian. illisque motibus addendæ radices anni primi Per. Iul. n secundo casu obserua- is est excessus seu ifferentia anni Periodi Iul. dati, ab anno Per. ul. 3930, tum motus huius differentiæ quæendi illisque motibus addendæ radices anni 930.

EXEMPLVM.

Plenilunium de quo supra contigit anno Period. Iul. 6291 completo: excessus seu differentia a 3930 est 2361. Quæro iam motum latitudinis.

		S.	G.	M.	S.
Anni	2000	6	19	52	49
Anni	300	8	5	58	54
Anni	61	8	29	54	31
Septemb. comm.		11	4	43	51
Dies	15	6	18	26	24
Horæ	10		5	30	45
Min.	58			31	24
Radix Periodi Iulianæ anni					
3930		6	16	47	31
Summa		0	11	45	9

CANON. V.

DATO cuiuslibet anni mense Nouilunij medij aut Plenilunij tempus inuenire.

Collige ad dati mensis initium ex Tabulis 7, & 8, medios motus Lunæ à Sole: si consurgant signa 0, 0, 0, Nouilunium erit media nocte ante Kalendas dati mensis. si signa 6, 0, 0, Plenilunium. Extra hos duos casus Nouiluniũ primó quærendi at& tempori Nouilunij inuento *addendi* *itrahendi* sunt dies 14 horę 18, scrup. habendum Plenilunium ex praxi inferior. ro ratione temporis Nouilunij inuenti. Id est si post additionem hanc Plenilunium transiliret mensem datum & in sequentem caderet, tum dies 14, horę 18, & scrup. 22. non addendi sed subtrahendi essent a tempore Nouilunij inuenti, ad habendum Plenilunium mensis dati.

EXEMPLVM.

Ad inueniendum Nouilunium.

Collige medios motus Lunæ a Sole ad annum 1578 menſemque Septembr. ſummam ſubtrahe a circulo integro, reſiduum quæſitum in motibus longitud. Lunæ, Tabulæ 9, & 4. dabit Dies, Horas, & Minuta Nouilunij.

		S.	G.	M.	S.
Anni	1000	6	10	31	16
Anni	500	3	5	15	38
Anni	77	4	12	34	56
September communis		2	22	21	2
Radix Anni Chriſti		7	0	38	15
Summa		11	21	21	7

hac a circulo integro deductâ ſuperſunt gradus 8. 38. 53.

Quæ in Tabulam 9. & 4. tranſlata dant dies 30, & horas poſt mediam noctem 5.m.45. igitur contigit Nouilunium 30, Septembr. horâ poſt med. noct. 5. m. 45. cui ſi adderes 14 dies, hor. 18, 22, vides quod excurreres in Octobrem. Quare non tempori Nouilunij inuento addendi ſunt dies 14. hor. 18. 22. ſed ab eodem tempore ſubtrahendi vt inueniatur Plenilunium 16. Sept. hor. poſt mediam noctem 11.m.23.

CANON. VI.

Ex Latitudinis motu Ecliptica Nouilunia vel Plenilunia deprehendere.

IN mediis Nouiluniis ſi motus Latit. inuentus per Canonem 4. ad iſta ſigna peruenerit, aut eadem exceſſerit, nempe 11, S. 18, g, 38, m.

vel 5, 9, 19; Item si hæc attigerit aut infra ea constiterit, 12, 20, 41, vel 6, 11, 22, Sol aliquibi deficere potest; quod est a Nodo gradibus 20, 41 distare versus Boream, aut grad. 11, 22, versus Austrum. In veris Nouiluniis si motus Latit. fuerit sign. 11, 21, 38, vel sign. 5, 12, 19, aut eadem excesserit: Item si sit sign. 12, 17, 41, vel sign. 6, 8, 22, aut iis maior, Eclipsis accidet. hoc est si grad. 17, 41, distet a Nodo versus Boream, vel grad. 8, 22, versus Austrum.

In mediis Pleniluniis, si motus medius Latit. fuerit sign. 12, 15, 12, vel sign. 6, 15, 12, aut minor. Item sign. 11, 14, 48, vel sign. 5, 14, 48, aut maior, Luna deficiet; quod est distare grad. 15, 12, a Nodis versus Austrum aut Boream.

In veris Pleniluniis vbi motus Latit. attigerit aut excesserit Signa 11, 17, 48, vel sig. 5, 17, 48, Item si fuerit sign. 12, 12, 12, vel 6, 12, 12, aut minor, hoc est si a nodis Boream versus, Austrumue distet grad. 12, 12, Luna deficiet.

CANON. VII.

Dato quouis Tempore verum Solis aut Lunæ locum inuenire.

SVME Anomaliam Solis aut Lunæ, & per illam Anomaliam excerpe ex Tabula 6. Prosthaphæresin Solis aut Lunę illāque si subtractitia sit medio Solis motui detrahe, si ād-

dititia, adde, Lunæ etiam prosthaphæres eodem modo pro qualitate subtrahe vel adiice motui Longitudinis Lunæ, & verum vtriusque sideris locum habebis.

EXEMPLVM.

Anomalia Solis anno 1578, ex Canone 111, est 2, 29, 46, 36. prosthaph. subtr. est 2, 8, 2, m. verus itaque locus solis hoc anno est. 6, 2, 30, 15.

CANON. VIII.

Veram Syzygiam inquirere.

DATO Anomaliæ motu vtriusque sideris in Nouiluniis aut Pleniluniis, colligе ex superioriCan. Prosthaphæreses vtriusque sideris. Si ambæ Prosthaphæreses eiusdem sint cõditionis hoc est ambæ subtractitiæ aut addititiæ minor deducitur de maiore, sin diuersæ qualitatis fuerint, inuicem adduntur; Tum motus conflatus ex additione, in secundo casu, vel ex subtractione, in primo quæritur in Tabula Horarum & in columna motus Æqualis Lunæ a Sole, tempusque inuento motui respondens sumitur vt tẽpori Plenilunij aut Nouilunij inuẽto addatur vel detrahatur ex sequẽtib' regulis. Si Prost. Sol. est addit. Lũ. subt. Tẽp' add. Si Prosth. Sol. est subtr. Lun. add. Tempus subtr. Si vtraq; subtr. sed Lun. maior. Tempus addẽd. Si vtraque subtr. sed Lun. minor. Tempus subtr. Si vtraque addit. sed Lun. maior. Tempus subtr. Si vtraque addit. sed Lun. minor. Temp. addẽd.

EXEMPLVM.

Plenilunij Ecliptici quod ex Tabulis noſtris contigit Anno 1578, 16. Septembr. Horis poſt mediam noctem 11. Minutis 23. G. M.
Anomal. Sol. 2,29,47,38. Sol. 2,2. S. ſubtr. Proſthaphæ.
Anom. Lun. 10,23,21,33. Lun. 2, 54. adde. ſumma 4, 56.
Hæc ſũma Diuiſa per motũ Horariũ) qui inuenitur in Tabula 11. ſyzygiarũ, & colũna *in veris ſyzygijs.* quærendo Anomaliæ Lunaris ſigna in fronte vel in calce, & Gradus ad læuã vel dextrã.) Quotus dat Horas 10. Minuta 29. Hoc tempus cum ex legibus ſupraſcriptis ſubtractitium ſit, detractum a tempore Plenilunij medij dat veram Syzygiam ſeu verum Plenilunium 16. Septembr. Hor. 0. M. 54, poſt mediam noctem quo tempore medium Eclipſis continget.

CANON. IX.

VERVM Latitudinis motum extra Syzygias & in Syzygijs inuenire, tum ipſam Latitudinem veram.

Collige ex Can. 4. Latitudinis motum ad datum tempus, quære poſtea cum anomalia Lunæ ad idem datum tempus collecta Proſthaphæreſim Lunarem, eamque ſi ſubtractitia eſt ſubtrahe a Latitudinis motu, ſi additicia adde, & verum Latitudinis motum obtinebis extra Syzygias. At in Syzygijs habendum eſt tempus Proſthaphæreticum ex Can. VIII. tum

motus Latitudinis huic tempori respondens pro qualitate tēporis adtitij vel subtractitij addendus vel subtrahendus est a collecto Latitudinis motu. Denique Prosthaphæresis Lunaris pro qualitate addenda vel subtrahenda est, a motu Latitudinis per tempus Prosthaphæreticum castigato.

EXEMPLVM.

Latitudinis motus in Plenilunio Ecliptico Anni 1578, 16, Septembr. Hor. 11. M. 23. post mediam noctem.

Radix Anni Christi.		7	10	23	10
Anni	1000	3	9	56	22
Anni	500	1	19	58	11
Anni	77	6	2	13	39
Septemb. communis		11	4	43	51
Dies completi	15	6	18	26	24
Horæ completæ	11		6	3	49
Minuta	23			12	29
Summa			11	58	5

Tempus Prosthaphæreticum subtractitium ex Can. 8. est Horarum 10. Minutorum 29. motus Latitudinis huic tempori respondens ex Tabula 4. est Graduum 5, 47, 15, is subtractus a Gradibus 11, 58, 5, relinquit pro medio motu Latitudinis tempore veræ oppositionis Gradus 6, 10, 50. Huic verò motui Prosthaphæresis Lunaris Cā. 8, inuēta cum sit addititia & Graduum 2, 54, addenda est & fiet verus motus Latitudinis Graduum 9, 4, 50. Qui motus si in Tabulam XVI. integri Canonis Latitudinis transferatur quærendo signa ☌, in capite Tabulæ & Gradus 9, 4, 50, ad læ-

uam conflet ſumpta parte proportionali vera latitudo Borealis minuta 47, 27. ferme.

CANON. X.

SOLIS, Lunæ, & Vmbræ Semidiametros ſimmanire.

Adi Tab. 13. ſemidiametrorum cum Anomalia Lunæ ſi Semidiametrum Lunæ, aut vmbræ quæras: vel cum Anomalia Solis ſi Semidiametrum Solis. Variatio vmbræ ſemper de vmbræ Semidiametro detrahenda eſt; at variatio Lunæ prout annotatum eſt auferri, aut addi debet.

EXEMPLVM SVPERIVS.

Anomalia Lunæ non emendata ex Can. 8. eſt 10, 23, 21, 33, Semidiameter Lunæ minutorum 15, 22, ex quibus ablata variatione 29, ſuperſunt minuta 14, 53. At ſemidiameter vmbræ habet 40. minuta, & ſubtracta variatione 10 reſpondente, relinquitur Semidiameter vmbræ 39, 50.

CANON. XI.

EX Latitudine vera & ſemidiametris Lunæ & vmbræ ſtatuere Eclipſin Lunarem præſagire, & defectuum qualitatem.

Si Latitudo minor ſit ſumma ambarum Semidiametrorum Lunæ & vmbræ, certò erit eclipſis. Sin maior ſit, nulla erit. Iterum ſi ſumma

Semidiametri Lunæ & Latitudinis Lunę, minor sit vmbra, tota Luna obscurabitur, si verò maior, ex parte tantùm.

EXEMPLVM SVPERIVS.

Vera Latitudo ex Can. 9. est minutorum 47.27, semidiameter vmbrę ex 10. Can. 39, 50. semidiameter Lunę 14, 59. summa semidiametrorum 54, 49. quæ vt vides maior est Latitudine: erit igitur Plenilunium illud Ecliptica. Iam verò cum summa semidiametri Lunę & Latitudinis 52, 26, sit maior semidiametro vmbræ 39, 49. luna ex parte duntaxat obscurabitur.

CANON. XII.

QVANTITATEM Eclipsis Lunaris per digitos inquirere.

Latitudinem de summa semidiametrorum subtrahe, residuum per 6. multiplicatum partire per lunæ semidiametrum, quotus numerus digitos indicabit, per quos corpus lunę mensurabitur, ita vt si tota luna sine mora obscuretur in digitorum sit eclipsis: si cum mora tota obscuratur, plures 12 digiti numerantur.

EXEMPLVM SVPERIVS.

Latitudinem 47, 27. de summa semidiametrorum 54, 49, subtrahe residuum est minuta 7, 22. hunc 7 minuta prima in minuta secunda multiplicatione facta per 60 dissolue, fient mi-

nuta secunda 410, & additis 21, 431. quæ per 6. multiplicata dant 2586 minuta secunda. Hæc diuisa per semidiametrum lunæ 14, 59. in minuta secunda dissolutum, id est per minuta secunda 899, fiunt in quoto 3. fermè digiti.

CANON. XIII.

IN quocumque anno Iuliano dato odorari quæ futuræ sint Eclipses.

Quære principio anni dati mẽseque Ianuar. ex Can. 5. Nouilunium aut Plenilunium. Tum ad tempus Nouilunij aut Pleniluniȷ inuenti motum latitudinis collige & ex Can. 6. recognosce an sit intra terminos Eclipticos, si sit intra, erit Eclipsis illo mense Ianuario si extra, Adi tabulam 5. mensium lunarium & è columna latitudinis lunæ numerum illum extrahito qui additus latitudini iuuentæ lunam intra terminos Eclipticos constituat.

EXEMPLVM SVPERIVS.

Anno 1578. Mense Ianuario ex Can. V. Plenilunium contigit 23. Ian. Hor. 5. 31. M. post mediam noctem. motus latitudinis tunc erat 4, 6, 35, 59. Iam verò si ex Tabula 5. mensium lunarium extrahas mensis secundi motum latitudinis 2, 1, 20, 30, & addas motui 4, 6, 35, 59. fiet summa intra terminos Eclipticos 6, 7, 56, 29. Iterum si mensis octaui lunaris latitudinem 8, 5, 22, 0. Iungas latitudini 4, 6, 35, 59. fiet latitudo Eclipt. 11, 57, 59. At in primo

casu duo menses lunares complectuntur dies cõpletos 59. Hor. 1. m. 28. qui additi Ianuarij 23. Hor. 5. M. 31. constant dies completos 81. Hor. 6. m. 59. & incidunt in Martij communis vicesimum tertiũ Horamque post mediam noctem 6. & m. 59. Octo vero menses dant dies completos 236. H. 5. M. 52. qui si ad 23. Ianuarij Hor. 5. m. 31. accedant, constabunt dies ab initio Ianuarij 259. H. 11. m. 23. post mediam noctem. Hi vero dies cadunt in 16. septembr. & Hor. 11. m. 23. quando hæc secunda in illo anno Eclipsis lunaris contigit.

CANON. XIV.

VERVM motum Solis exactius quam supra inuenire.

Quære ad tempus datum Anomaliam Æquinoctiorum cum sua Prosthaphæresi in sequentibus proximè tabulis: Hanc Prosthaphær. serua. Collige postea Æquales motus solis, Centri solis & Apogæi solis. Cum motu Centri ex extrahe Prostaphær. Centri ex Tabulis, & adde vel subtrahe pro qualitate Prosthapher. Centri a medio motu Apogæi, & obtinebis verum Apogæum solis, quod subtrahes a medio motu solis vt consequare veram & castigatam anomaliam solis cum qua inuenies Prosthaphæresim castigatam solis Tabul. 6. quam addes vel subtrahes à medio solis motu & habebis verum solis motum à medio Æquinoctio & cum Prosthaphær. Aequinoctiorum (addenda vel subtrahenda ab eodem medio solis motu) à vero Aequinoctio.

CANON. XV.

EVNDEM motum exactissimè habere.

Adi cum motu Centri solis Tabul. 19. excerpe scrupula solis proportionalia; posteà ope Anomaliæ sol. ex Tabul. 21. cape excessum solis. Tum hac aurea regula rem confice, si 60. (hic terminus 60. principiò semper assumitur) dant v. g. Minuta Excessus inuenti 24, scrupula proportionalia iuuenta quid dabunt? qui consurget in quarto termino numerus *Excessus* erit, semper *addendus* Prosthaphæresi solis Can. XIV. inuentæ.

CANON. XVI.

VERVM motum Longitudinis Lunæ exactius assequi.

Colligito ad tempus datum motum longitudinis lunæ à sole, & Anomaliam lunarem. Duplica deinde longitudinem lunæ & fiet *Anomalia* Centri lunæ: cum qua ingressus Tabul. 20. Prosthaphæresin Centri Lunę extrahe, quam adde vel detrahe ab *Anomalia Lunari*. Hæc *Anomalia* ita castigata si in Tabulam 6. Prosth. transferatur dabit Prosthaphæresin addendam motui longitudinis lunæ, vel subducendam, vt obtineatur verus longit. lunæ motus. Qui vt exactissimè habeatur adi Tabul. 20. cum *Anomalia* Centri *Lunæ*, vt scrupula proportionalia colligas. Posteà adi etiam Tabul. 21. cum *Anomalia Lunæ* vt extrahas excessum *Lunæ*.

Denique partem proportionalem excessus vt supra Can. 15 inuestiga hoc pacto. Si 60. dant excessum, puta 20 minuta inuenta, scrupula proportionalia inuenta quid dabunt? Quotus partem *Excessus* indicabit addendam semper Prosthaphæresi *Lunæ* inuentæ in Tabul. 6. Prosthaphæreseon.

CANON XVII.

VERAM Syzygiam exactissimè inuestigare. Ex Can. VIII. operare, sed vt operatio exactissima sit, vtere *Anomalia* & Prostaphæresi solis, non vtcumque sed castigatis ex Can. 14. & 15. Accipe etiam *Anomaliam* & Prosthaphæresim *Lunæ* castigatas per Can. 15. & 16. Cum his *Anomalijs* & Prosthaphæresibus tempus Prostaphæreticum habebis addendum vel subtrahendum à tempore plenilunij vel Nouilunij prout, Can. 8. præscribitur Iterum ad hoc tempus plenilunij aut nouilunij castigati *Anomaliæ* quærendæ & Prosthaphæreses vt habeatur nouum tempus Prosthaphæreticum vt videsi in praxi inferiori.

PRAXIS.

Eclipsis Lunæ Anni 1578. obseruata à Tychone Vranoburgi 16. Septembris communis, hora post mediam noctem 1. minutis 17.

Nota sumi hic annos 1578. ineuntes, dies etiam 16. mensis septemb. quare in Tabulis quærun-

tur anni 1577, & dies 15. *Secundo* Annos Biſſextiles a Chriſto, & Periodi Iulianæ eſſe annotatos pagina 5. (reiectis centenarijs & millenarijs quibus Biſſextainſeruimus in Tabulis) In illis Annis, Menſes Biſſextiles vſurpandi ſunt. *Tertiò* apud Aſtrologos quando memoratur Eclipſis, momentum memoratum eſſe medium tempus Eclipſis ſecundum veros motus Solis & Lunæ. *Quartò* ſpatium inter veram & mediam Syzy. nunquam maius eſſe Horis 14. cum dimidia.

Pleniluniũ medium contigit Pariſijs ex noſtris Tabulis Hor. poſt mediam noctem. 11. Minutis 23. ad quod tempus ſequentes motus colliguntur.

Aequalis Mot. Sol.	6,	4,	33,	15,
Motus Centri Sol.	6,	9,	27,	6,
Scrup. proportionalia.			1,	
Motus Apogæi Sol.	3,	4,	45,	43,
Proſthaphæreſ. Centri Sol.			59,	addẽ
da Motui Apog. vt fiat sũma	3,	5,	44,	43.

Subtrahe Apogæum Caſtigatum à Motu ſolis Aequali fiet Anomal. ſol. *Primò* Caſtigata.

	2,	28,	48,	32,

Exceſſus Minuta 25, quæ ſi in ſecunda diſſoluas fient 1500.

Igitur ex Can. 14. ſi 60. dant 1500. ſcrupul. Proport. 1. dabit 26. ſecunda, quæ propter exiguitatem negligimus alioqui addenda Proſthaphæreſi ſolis.

Motus Longitudinis Lunæ.	6,	0,	0,	12,
Motus Centr. Lun.	0	0	0	0
Proſthaph. Centri	0	0	0	0
Scrup. Proport.			0	0

Nulla igitur eſt Anomaliæ Lunaris prima caſtigatio.

Anomal. ſol. 2 28 47 52 Solis 2 g. 2. Subtr. Proſthaph.

Anomal. Lun. 10 23 54 8 Lun. 2 g. 51. Adde.

Summa 4. g. 53. hæc in tempus Proſthaphæreticum mutatur ſi eam ipſam ſuminam diuidas per 28, 13, motum horarium ex Tabula 11, & columnis *in veris Syzygijs* excerptum, ope ſcilicet Anomal. Lunaris cuius ſigna in fronte Tabulæ 11, & Gradus ad læuam vel dextram quæruntur. Itaque ſumma Gradus 4, M. 53. diuiſa per 28. M. 13. quotum dat 10, Hor. & 20. M. tempus Proſthaphæreticum ſubtractitium.

Verum ergo Pleniſunium Hor. poſt mediam noctem 1. 3. Pariſijs. Ad hoc tempus Anomalias iterum collige vt exactum & caſtigatum habeas Plenilunium.

ANOMALIAE SECVNDO CAſtigatæ per ſubtractionem motus reſpondentis tempori Proſthaphæretico.

Anomal. Sol. 2 28 22 24 Sol. 2. G. 2. Subtr. Proſtha.

Anomal. Lun. 10 18 17 1 Lun. 3. G. 13. *Adde.*

Summa 5, 15, diuiſa ex Can. 8, per Motum Horar. Tabula XI. *in veris Syzygijs* 28. M. 22. exhibet in Quoto 11. Hor. Min. 3. tempus Proſthaphæreticum ſubtrahendum à tempore Plenilunij 1578, 16. Sept. Hor. 11. M. 23. vt ſit

verum Plenilunium Hor. 0. M. 20. post mediam noctem Parisijs.

MOTVS.

Latitudinis castigatus deductione adhibita motus Latitudinis respondentis tempori Prosthaphæretico primò inuento 10. Hor. 23. M.

Medius Latitud. Motus	11	58	5
Motus Prosthaph. Subtr.	5	41	45
Residuum ex subtract.	6	16	20

Igitur motus Latitudinis ad tempus veræ Oppositionis 6, 16, 20, cui si addas Prosthaphær. Lunarem æquatam gradus 3. 13. fiet verus Latitud. Motus, Gradus 9, 29, 20.

Vera Latitudo 49, Semidiameter Lunæ M. 15. 23. Variatio Lunæ 29. auferenda. Residuum 14, 54. semidiameter Vmbræ Variatione 10 detracta, 39. 50. summa semidiametrorum Vmbræ & Lunę, 54, 44. Latitudine 49 deducta, residuum 5, 44, quod in 6, ductum, & diuisum per Lunæ semidiametrum exhibet digitos 2, cum semisse ferme. duorum igitur digitorum & amplius fuit Eclipsis.

Tabul. 17. Æqu. motus Anom. Æquinoctiorum

Anni	S.	G.	M.	S.	Anni.	G.	M.	S.
1000	6	22	55	00	1		12	10
2000	1	15	50	00	2		24	20
3000	8	8	45	00	3		36	30
4000	3	1	40	00	4		48	42
5000	9	24	35	00	5	1	00	52
6000	4	17	30	00	6	1	13	2
7000	11	10	25	00	7	1	25	12
100		20	17	30	8	1	37	24
200	1	10	35	00	9	1	49	34
300	2	00	52	30	10	2	1	44
400	2	21	10	00	11	2	13	54
500	3	11	27	30	12	2	26	6
600	4	1	45	00	13	2	38	16
700	4	22	2	30	14	2	50	26
800	5	12	20	00	15	3	2	36
900	6	2	37	30	16	3	14	48
80		16	14	00	17	3	26	58
60		12	10	30	18	3	39	8
40		8	7	00	19	3	51	18
20		4	3	30				

	MENSES				*COMMVNES.*			
	S.	G.	M.	S.		S.	G.	M. S.
Ian.	0	0	0	0	Iul.		6	3
Febr.			1	4	Aug.		7	17
Mart.			2	1	Sept.		8	21
April.			3	5	Oct.		9	23
Mai.			4	7	Nou.		10	27
Iun.			5	11	Dec.		11	29

Menſes communes pro Biſſextilibus ſumi poſſunt.

Motus Centri Solis in diebus duplicatus dat motum Anomaliæ Æquinoctiorum in iiſdem diebus; in Horis vacat.

Radices Anomaliæ Æquinoctiorum.

	S.	G.	M.	S.
Radix Anni primi Period. Iul.	4	18	8	22
Radix Period. Iul. Anni 3930	7	25	53	36
Radix a Christo nato	0	14	41	18

RADICES

TYCHONIANÆ MOTVVM Lunæ Solarium.

Ad initium annorum Christi media nocte ante Calendas Ianuarias.

Parisijs.

Motus æqualis Solis	9	8	6	24
Apogæi Solis	2	15	39	45
Longitudinis Lunæ	6	29	42	53
Anomaliæ Lunæ	6	28	22	56
Latitudinis Lunæ	7	9	45	43

Ad motus Solares & Lunares inueniendos, & ad Eclipsium facilem & expeditam analysin vtere his superioribus radicibus & duabus sequentibus Tabulis, cum hac cautione, quod summa vel differentia Prosthaphæreseon, debet quæri in Tabula 4. Horarum & Columna Longitudinis Lunæ, vt in Horis ad lęuam respondentibus habeatur tempus Prosthaphæreticum: quo subtracto vel addito ad medium Nouilunium vel Plenilunium, iterum ad illud Nouilunium vel Plenilunium ita castigatum quærendi sunt motus Anomaliæ Solis & Lunæ & operandum vt præscribitur Canonibus superioribus ad 14 exclusiuè.

Tabula 22. Motuum Tychonian. in Annis.

Ad motus menstruos, diurnos, & horarios tum Solis tum Lunæ vtere Tabulis 2, 3, 4, & 8, & 9. pro. Longitud. Lunæ. Pro Eclipsium Analysi Canonibus ad 14. exclusiue. & Tabulis. 6, 10, 11, 12, 13, 14, 15, & 16. Anomalia obtinetur detracto Apogeo a motu Longitudinis Solis.

Anni	Motus Solis				Apogæi Sol.		
S.	G.	M.	S.	G.	M.	S.	
1	11	29	45	41	0	0	45
2	11	29	31	21	0	1	30
3	11	29	17	2	0	2	15
4	0	0	1	51	0	3	0
5	11	29	47	32	0	3	45
6	11	29	33	12	0	4	30
7	11	29	18	53	0	5	15
8	0	0	3	42	0	6	0
9	11	29	49	22	0	6	45
10	11	29	35	3	0	7	30
11	11	29	20	44	0	8	15
12	0	0	5	33	0	9	0
13	11	29	51	13	0	9	45
14	11	29	36	54	0	10	30
15	11	29	22	35	0	11	15
16	0	0	7	24	0	12	0
17	11	29	53	4	0	12	45
18	11	29	38	45	0	13	30
19	11	29	24	25	0	14	15
20	0	0	9	14	0	15	0
40	0	0	18	29	0	30	0
60	0	0	27	43	9	45	0
80	0	0	36	58	1	0	0
100	0	0	46	12	1	15	0
200	0	1	32	24	2	30	0
300	0	2	18	36	3	45	0
400	0	3	4	48	5	0	0
500	0	3	51	0	6	15	0
600	0	4	37	12	7	30	0
1000	0	7	42	0	12	30	0

Tabula 23. Motuum Tychonian. in Annis.

An.	Long. Lun. S.	G.	M.	S.	An. Lun. S.	G.	M.	S.	Latit. Lunæ. S.	G.	M.	S.
1	4	9	37	23	2	28	43	8	4	28	42	45
2	8	19	14	45	5	27	26	15	9	27	25	31
3	0	28	52	8	8	26	9	23	2	26	8	16
4	5	20	40	57	0	7	56	25	8	8	4	47
5	10	0	18	20	3	6	39	33	1	6	47	33
6	2	9	55	43	6	5	22	40	6	5	30	18
7	6	19	33	5	9	4	5	48	11	4	13	4
8	11	11	21	55	0	15	52	50	4	16	9	35
9	3	20	59	17	3	14	35	58	9	14	52	20
10	8	0	36	40	6	13	19	5	2	13	35	6
11	0	10	14	3	9	12	2	13	7	12	17	51
12	5	2	2	52	0	23	49	15	0	24	14	22
13	9	11	40	15	3	22	32	23	5	22	57	8
14	1	21	17	37	6	21	15	30	10	21	39	53
15	6	0	55	0	9	19	58	38	3	20	22	39
16	10	22	43	49	1	1	45	40	9	2	19	10
17	3	2	21	12	4	0	28	48	2	1	1	55
18	7	11	58	35	6	29	11	55	6	29	44	41
19	11	21	35	57	9	27	55	3	11	28	27	26
20	4	13	24	47	1	9	42	5	5	10	23	57
40	8	26	49	33	2	19	24	10	10	20	47	54
60	1	10	14	20	3	29	6	15	4	1	11	52
80	5	23	39	7	5	8	48	20	9	11	35	49
100	10	7	3	53	6	18	30	25	2	21	59	46
200	8	14	7	47	1	7	0	50	5	13	59	33
300	6	21	11	40	7	25	31	15	8	5	59	19
400	4	28	15	34	2	14	1	40	10	27	59	5
500	3	5	19	27	9	2	32	5	1	19	58	52
600	1	12	23	21	3	21	2	30	4	11	58	38
000	6	10	38	55	6	5	4	10	3	9	57	44

Tabula 18. Prosthaphæreseon Æquinoctiorum.

G.	S.0.Auf.		S.1.Auf.		S.2.Auf.		G.
	G.	M.	G.	M.	G.	M.	
0	0	0	0	37	1	4	30
3	0	3	0	40	1	6	27
6	0	7	0	43	1	7	24
9	0	11	0	46	1	9	21
12	0	15	0	49	1	10	18
15	0	19	0	52	1	11	15
18	0	22	0	55	1	12	12
21	0	26	0	57	1	13	9
24	0	30	1	0	1	13	6
27	0	33	1	2	1	14	3
30	0	37	1	4	1	14	0
	S.11.Ad.		S.10.Ad.		S.9.Ad.		

G.	S.3.Auf.		S.4.Auf.		S.5.Auf.		G.
	G.	M.	G.	M.	G.	M.	
0	1	14	1	4	0	37	30
3	1	14	1	2	0	33	27
6	1	13	1	0	0	30	24
9	1	13	0	57	0	26	21
12	1	12	0	55	0	22	18
15	1	11	0	52	0	19	15
18	1	10	0	49	0	15	12
21	1	9	0	46	0	11	9
24	1	7	0	43	0	7	6
27	1	6	0	40	0	3	3
30	1	4	0	37	0	0	0
	S.8.Ad.		S.7.Ad.		S.6.Ad.		

Tab. 19 Prosthaphæreseon Centri Solis.

G.	S.0.Auf.			S.1.Auf.			S.2. Auf.			G
	G.	M.	Scr.	G.	M.	Scr.	G.	M.	Scr.	
0	0	0	60	2	30	56	4	27	46 30	
3	0	15	60	2	44	56	4	36	45 27	
6	0	31	60	2	57	55	4	45	43 24	
9	0	46	60	3	10	54	4	52	42 21	
12	1	2	59	3	22	53	4	59	41 18	
15	1	17	59	3	34	52	5	5	39 15	
18	1	32	59	3	46	51	5	10	38 12	
21	1	47	58	3	58	50	5	14	36 9	
24	2	2	58	4	7	48	5	18	34 6	
27	2	16	57	4	17	47	5	21	33 3	
30	2	30	56	4	27	46	5	23	31 0	

S. 11.Ad. S.10.Ad. S.9.Ad.

G.	S.3.Auf.			S.4.Auf.			S.5.Auf.			G.
	G.	M.	Scr.	G.	M.	Scr.	G.	M.	Scr.	
0	5	23	31	4	54	16	2	56	4 30	
3	5	24	30	4	46	15	2	41	4 27	
6	5	24	28	4	37	13	2	25	3 24	
9	5	23	27	4	28	12	2	7	2 21	
12	5	22	25	4	17	11	1	50	2 18	
15	5	20	24	4	5	9	1	32	1 15	
18	5	17	22	3	53	8	1	14	1 12	
21	5	12	21	3	40	7	0	56	1 9	
24	5	6	19	3	26	6	0	38	0 6	
27	5	0	18	3	11	5	0	19	0 3	
30	4	54	16	2	56	4	0	0	0 0	

S.8.Ad. S.7.Ad. S.6.Ad.

Tabula 20 Prosthaphæreseon Centri Lunæ.

G.	S.0.Auf.			S.1.Auf.			S.2.Auf.			G.
	G.	M.	Scr.	G.	M.	Scr.	G.	M.	Scr.	
0	0	0	0	4	4	5	8	21	18	30
3	0	24	0	4	29	6	8	46	19	27
6	0	49	0	4	55	7	9	12	21	24
9	1	13	0	5	20	8	9	37	22	21
12	1	37	1	5	45	9	10	2	24	18
15	2	1	1	6	11	11	10	26	25	15
18	2	26	2	6	37	12	10	49	27	12
21	2	50	3	7	3	13	11	11	28	9
24	3	15	3	7	29	15	11	32	30	6
27	3	40	4	7	55	16	11	52	32	3
30	4	4	5	8	21	18	12	11	33	0

	S.11.Ad.	S.10.Ad.	S.9.Ad.

G.	Sig.3.Auf.			S.4.Auf.			S.5.Auf.			G
	G.	M.	Scr.	G.	M.	Scr.	G.	M.	Scr.	
0	12	11	33	13	2	47	8	40	57	30
3	12	26	35	12	51	48	7	56	57	21
6	12	41	36	12	37	49	7	10	58	24
9	12	53	38	19	12	51	6	22	58	1
12	13	3	39	11	58	52	5	31	59	1
15	13	10	41	11	33	53	4	39	59	1
18	13	14	42	11	5	54	3	45	59	1
21	13	16	43	10	33	54	2	50	60	
24	13	15	45	9	59	55	1	54	60	
27	13	10	46	9	21	56	0	57	60	
30	13	2	47	8	40	57	0	0	60	

	S.8.Ad.	S.7.Ad.	S.6.Ad.

Solis Lunæ.			Solis Lunæ.			Solis Lunæ.		
G.	Signa 0.		Signa 1.			Signa 2.		G.
	M.	G. M.	M.	G.	M.	M.	G. M.	
0	0	0 0	12	1	8	21	2 6	0
3	1	0 7	13	1	14	22	2 11	3
6	2	0 14	14	1	21	22	2 15	6
9	4	0 31	15	1	27	23	2 20	9
12	5	0 28	16	1	33	23	2 23	12
15	6	0 34	12	1	39	24	2 27	15
18	7	0 41	18	1	45	24	2 31	18
21	8	0 48	19	1	50	24	2 34	21
24	9	0 55	19	1	56	25	2 37	24
27	11	1 1	20	2	1	25	2 39	27
30	12	1 8	21	2	6	25	2 4	30
	Signa. 11.		Signa. 10.			Signa. 9.		

Signa. 3.	Signa. 4.	Signa. 5.

G.	Solis Lunæ.		Solis Lunæ.			Solis Lunæ.			G.
	M.	G. M.	M.	G.	M.	M.	G.	M.	
0	25	2 41	22	36	60	13	39	30	0
3	25	2 43	22	33	57	12	31	27	3
6	25	2 4	21	29	54	11	22	24	6
9	25	2 45	20	25	51	10	12	21	9
12	25	2 45	20	20	48	8	3	18	12
15	25	2 45	19	14	45	7	53	15	15
18	24	2 44	18	8	42	6	42	12	18
21	24	2 43	17	2	39	4	32	9	21
24	24	2 41	16	55	36	3	21	6	24
27	23	2 39	15	47	33	1	11	3	27
30	22	2 36	14	39	30	0	0	0	30
	Signa. 8.		Signa. 7.			Signa. 6.